

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 September 2002 (26.09.2002)

PCT

(10) International Publication Number
WO 02/074992 A2

(51) International Patent Classification⁷: **C12Q 1/68**

(21) International Application Number: **PCT/IB02/00565**

(22) International Filing Date: 25 February 2002 (25.02.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/811,352 19 March 2001 (19.03.2001) US
10/067,514 4 February 2002 (04.02.2002) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier applications:

US	09/811,352 (CON)
Filed on	19 March 2001 (19.03.2001)
US	Not furnished (CON)
Filed on	4 February 2002 (04.02.2002)

(71) Applicant (for all designated States except US): **DECODE GENETICS EHF.** [IS/IS]; Sturlugötu 8, IS-101 Reykjavik (IS).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GRETARSDOTTIR, Solveig** [IS/IS]; Smaragata 6, IS-101 Reykjavik

(IS). **JONSDOTTIR, Sif** [IS/IS]; Vesturgata 73, IS-101 Reykjavik (IS). **REYNISDOTTIR, Sigridur, Th.** [IS/IS]; Storgærði 8, IS-108 Reykjavik (IS).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **HUMAN STROKE GENE**

(57) Abstract: A role of the human PDE4D gene in stroke is disclosed. Methods for diagnosis, prediction of clinical course and treatment for stroke using polymorphisms in the PDE4D gene are also disclosed.



WO 02/074992 A2

HUMAN STROKE GENE

RELATED APPLICATION

This is a continuation of U.S. Application _____ (2345.2010-003), which was filed on February 4, 2002, which is a continuation-in-part of U.S. Application No. 09/811,352, filed March 19, 2001. The entire teachings of the above applications are incorporated herein by reference.

BACKGROUND OF THE INVENTION

Stroke is a major health problem in western societies. It is the leading cause of disability, the second leading cause of dementia and the third most common cause of death (Bonita, R., *Lancet* 339:342 (1992)). As it is more common in the elderly, the public health impact of stroke will increase in the next decades with growing life expectancy. Almost 1 out of 4 men and nearly 1 out of 5 women aged 45 years will have a stroke if they live to their 85th year (Bonita, R., *Lancet* 339:342 (1992)). Strategies to diminish the impact of stroke includes prevention and treatment with thrombolytics and possibly neuroprotective agents. The success of preventive measures will depend on the identification of risk factors and means to modulate their risk.

The clinical phenotype of stroke is complex but can be broadly divided into ischemic and hemorrhagic stroke. The majority of strokes (80 to 90%) are ischemic, caused by obstruction of blood flow through extra- or intracranial vessels (Mohr, J.P., *et al.*, *Neurology*, 28:754-762 (1978); Caplan, L.R., *In Stroke, A Clinical Approach* (Butterworth-Heinemann, Stoneham, MA, ed 3, 1993)). The remainder are hemorrhagic strokes (10-20%), resulting from ruptures of intracranial vessels. Ischemic stroke can be further subdivided into large vessel occlusive disease, small vessel occlusive disease, and cardiogenic stroke. Transient ischemic attack (TIA), although not defined as a stroke because the signs and symptoms (which are the same as for stroke) last for a short period of time (less than 24 hours, usually 5 to 20

minutes), indicates a serious underlying risk that a stroke may follow, and it is believed that the same pathophysiologic mechanisms are responsible for TIA and ischemic stroke (Caplan, L.R., *In Stroke, A Clinical Approach* (Butterworth-Heinemann, Stoneham, MA, ed 3, 1993)).

- 5 The predominant risk factor for all types of stroke is hypertension (Thompson, D.W. and A.J. Furlan, *Neurosurg. Clin. N. Am.*, 8:265-269 (1997); Agnarsson, U., *et al.*, *Ann. Intern. Med.*, 130:987 (1999)). Hypertension is in itself a complex disease as are the other known secondary risk factors, diabetes and hyperlipidemia. In addition, there are environmental risk factors such as smoking.
- 10 Stroke is therefore considered to be a highly complex disease consisting of a group of heterogeneous disorders with multiple risk factors, genetic and environmental.

- The identification of genetic determinants of common diseases such as stroke, which may result from an interplay among multiple genes and between genes and environmental risk factors, has proven to be a difficult task. Studies of the
- 15 genetic contribution to stroke have mainly focused on rare Mendelian diseases where stroke is a part of the phenotype or on finding association with possible candidate genes such as genes contributing to hypertension or lipid metabolism. Several genes have been identified that play roles in the pathogenesis of rare stroke syndromes such as the *Notch3* gene in CADASIL (cerebral autosomal dominant arteriopathy
- 20 with subcortical infarctions and leukoencephalopathy) (Tournier-Lasserre, E., *et al.*, *Nat. Genet.*, 3:256-259 (1993); Joutel, A., *et al.*, *Nature*, 383:707 (1996)), *Cystatin C* in the Icelandic type of hereditary cerebral hemorrhage with amyloidosis (Palsdottir, A., *et al.*, *Lancet*, 2:603-604 (1998)), *APP* in the Dutch type of hereditary cerebral hemorrhage (Levy, E., *et al.*, *Science*, 248:1124 (1990)), and the
- 25 *KRIT1* gene in patients with hereditary cavernous angioma (Gunel, M., *et al.*, *Proc. Natl. Acad. Sci. U.S.A.*, 92:6620-6624 (1995); Laberge-le Couteux, S., *et al.*, *Nat. Genet.* 23:189 (1999); Sahoo, T., *et al.*, *Hum. Mol. Genet.* 8:2325 (1999)).

- In addition to family history information for stroke, it is desirable to develop diagnostic methods for the early diagnosis of the disease or predisposition for the
- 30 development of stroke. Better means for predicting and identifying stroke should lead to better prophylactic and treatment regimens.

SUMMARY OF THE INVENTION

As described herein, it has been discovered that the gene that encodes phosphodiesterase 4D (hereinafter referred to as "PDE4D") has been correlated through human linkage studies to stroke, particularly ischemic strokes and transient
5 ischemic attacks. Five new exons, here referred to as 4D7-1, 4D7-2, 4D7-3, 4D6 and 4D8 have been identified. Three novel splice variants have also been identified (see Fig. 4).

The present invention relates to isolated nucleic acid molecules comprising the PDE4D gene. In one embodiment, the isolated nucleic acid molecule comprises
10 a nucleotide sequence selected from the group consisting of SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Tables 9 and 10, and the complement thereof. The invention further relates to a nucleic acid molecule which hybridizes under high stringency conditions to a nucleotide sequence selected from the group consisting of SEQ ID NO: 1 which may optionally
15 comprise at least one polymorphism as shown in Tables 9 and 10, and the complement thereof. The invention additionally relates to isolated nucleic acid molecules (e.g., cDNA molecules) encoding a PDE4D polypeptide (e.g., encoding SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14 or another splicing variant of PDE4D polypeptide which includes a polymorphic site and/or novel exon selected from the
20 group consisting of 4D6, 4D7-1, 4D7-2, 4D7-3 and 4D8).

The invention further provides a method for assaying a sample for the presence of a nucleic acid molecule comprising all or a portion of PDE4D in a sample, comprising contacting said sample with a second nucleic acid molecule comprising a nucleotide sequence encoding a PDE4D polypeptide (e.g., SEQ ID
25 NO: 1 or the complement of SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Tables 9 and 10; a nucleotide sequence encoding SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14 which may optionally comprise at least one polymorphism as shown in Tables 9 and 10, or another splicing variant of PDE4D polypeptide which includes a polymorphic site and/or exon selected from
30 the group consisting of 4D6, 4D7-1, 4D7-2, 4D7-3 and 4D8), or a fragment or derivative thereof, under conditions appropriate for selective hybridization. The

invention additionally provides a method for assaying a sample for the level of expression of a PDE4D polypeptide, or fragment or derivative thereof, comprising detecting (directly or indirectly) the level of expression of the PDE4D polypeptide, fragment or derivative thereof.

5 The invention also relates to a vector comprising an isolated nucleic acid molecule of the invention operatively linked to a regulatory sequence, as well as to a recombinant host cell comprising the vector. The invention also provides a method for preparing a polypeptide encoded by an isolated nucleic acid molecule described herein (an PDE4D polypeptide), comprising culturing a recombinant host cell of the
10 invention under conditions suitable for expression of said nucleic acid molecule.

 The invention further provides an isolated polypeptide encoded by isolated nucleic acid molecules of the invention (e.g., PDE4D polypeptide), as well as fragments or derivatives thereof. In a particular embodiment, the polypeptide comprises the amino acid sequence of SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO:
15 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 12 or SEQ ID NO: 14 and containing at least one polymorphism described herein, particularly a polymorphism in all or a portion of exon 4D1, such as a SNP at 1,591,306, or one or a combination of SNPs in Table 5B. In another embodiment, the polypeptide is another splicing variant of an
20 PDE4D polypeptide, particularly a splicing variant containing all or a portion of exon selected from the group consisting of, 4D7-1, 4D7-2, 4D7-3 and 4D8. The invention also relates to an isolated polypeptide comprising an amino acid sequence which is greater than about 90 percent identical to the amino acid sequence of SEQ
25 ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 12 or SEQ ID NO: 14 and containing at least one polymorphism described herein, particularly a polymorphism in all or a portion of exon 4D1, such as a SNP at 1,591,306, or one or a combination of SNPs in Table 5B; preferably about 95 percent identical.

 The invention also relates to an antibody, or an antigen-binding fragment
30 thereof, which selectively binds to a polypeptide of the invention, as well as to a method for assaying the presence of a polypeptide encoded by an isolated nucleic

acid molecule of the invention in a sample, comprising contacting said sample with an antibody which specifically binds to the encoded polypeptide.

The invention further relates to methods of diagnosing a predisposition to stroke. The methods of diagnosing a predisposition to stroke in an individual
5 include detecting the presence of a mutation in PDE4D, as well as detecting alterations in expression of an PDE4D polypeptide, such as the presence of different splicing variants of PDE4D polypeptides. The alterations in expression can be quantitative, qualitative, or both quantitative and qualitative. The methods of the invention allow the accurate diagnosis of stroke at or before disease onset, thus
10 reducing or minimizing the debilitating effects of stroke.

The invention additionally relates to an assay for identifying agents which alter (e.g., enhance or inhibit) the activity or expression of one or more PDE4D polypeptides. For example, a cell, cellular fraction, or solution containing an PDE4D polypeptide or a fragment or derivative thereof, can be contacted with an
15 agent to be tested, and the level of PDE4D polypeptide expression or activity can be assessed. The activity or expression of more than one PDE4D polypeptides can be assessed concurrently (e.g., the cell, cellular fraction, or solution can contain more than one type of PDE4D polypeptide, such as different splicing variants, and the levels of the different polypeptides or splicing variants can be assessed).

20 In another embodiment, the invention relates to assays to identify polypeptides which interact with one or more PDE4D polypeptides. In a yeast two-hybrid system, for example, a first vector is used which includes a nucleic acid encoding a DNA binding domain and also an PDE4D polypeptide, splicing variant, or fragment or derivative thereof, and a second vector is used which includes a
25 nucleic acid encoding a transcription activation domain and also a nucleic acid encoding a polypeptide which potentially may interact with the PDE4D polypeptide, splicing variant, or fragment or derivative thereof (e.g., a PDE4D polypeptide binding agent or receptor). Incubation of yeast containing both the first vector and the second vector under appropriate conditions allows identification of polypeptides
30 which interact with the PDE4D polypeptide or fragment or derivative thereof, and thus can be agents which alter the activity of expression of an PDE4D polypeptide.

Agents that enhance or inhibit PDE4D polypeptide expression or activity are also included in the current invention, as are methods of altering (enhancing or inhibiting) PDE4D polypeptide expression or activity by contacting a cell containing PDE4D and/or polypeptide, or by contacting the PDE4D polypeptide, with an agent
5 that enhances or inhibits expression or activity of PDE4D or polypeptide.

Additionally, the invention pertains to pharmaceutical compositions comprising the nucleic acids of the invention, the polypeptides of the invention, and/or the agents that alter activity of PDE4D polypeptide. The invention further pertains to methods of treating stroke, by administering PDE4D therapeutic agents,
10 such as nucleic acids of the invention, polypeptides of the invention, the agents that alter activity of PDE4D polypeptide, or compositions comprising the nucleic acids, polypeptides, and/or the agents that alter activity of PDE4D polypeptide.

BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing and other objects, features and advantages of the invention
15 will be apparent from the following more particular description of preferred embodiments of the invention, as illustrated in the accompanying drawings.

Figs. 1A and 1B show two family pedigrees each affected by several of the stroke subtypes, including hemorrhagic stroke.

Figs. 2A, 2B and 2C show the genetic, combined and physical maps for
20 locating the PDE4D gene using 30 polymorphic markers. For the combined map, all markers have been assigned in the genetic and physical map unless otherwise indicated. (* indicates markers only assigned in physical map; ** indicates markers only assigned in genetic map).

Fig. 3 shows the genetic map of the stroke locus with exons and polymorphic
25 markers indicated. Markers identified by asterisks show association. The area defined by one drop in lod is approximately 4.6 Mb (approximately 5-6 cM).

Fig. 4 shows schematic representations of PDE4D splice variants. Splice variants 4D6, 4D7 and 4D8 are novel, as well as exons 4D6, 4D7-1, 4D7-2, 4D7-3 and 4D8. Splice variants 4DN1, 4DN2 and 4DN3 (Miro, *et al.*, *Biochem. Biophys.*

Res. Comm., 274:415-421 (2000)), and 4D1, 4D2, 4D3, 4D4 and 4D5 (Bolger *et al.*, *Biochem. J.*, Pt2:539-548 (1997) are known.

Fig. 5 is a schematic representation of the genetic map showing microsatellites and SNP haplotypes within the stroke gene.

5 Figs. 6.1 to 6.351 show the genomic sequence of the human PDE4D gene.

Figs. 7.1 to 7:10 show the amino acid sequences for the isoforms of the PDE4D gene. SEQ ID NO: 2 is D4; SEQ ID NO: 3 is N2; SEQ ID NO: 4 is D5; SEQ ID NO: 5 is N3; SEQ ID NO: 6 is D3; SEQ ID NO: 7 is N1; SEQ ID NO: 8 is D6; SEQ ID NO: 9 is D1; and SEQ ID NO: 10 is D2.

10 Figs. 8A and 8B list all publically available PDE4D2 mRNA's and novel eDNA segments identified by deCODE genetics.

DETAILED DESCRIPTION OF THE INVENTION

Extensive genealogical information for a population with population-based lists of patients has been combined with powerful genome sharing methods to map
 15 the first major locus in common stroke. A genome wide scan on patients, related within 6 meiotic events, diagnosed with stroke (ischemic and TIA) and their unaffected relatives has been completed. Locus *STRK1* on chromosome 5q12 has been identified through linkage studies to be associated with stroke. This locus does not correspond to known susceptibility loci for stroke or its risk factors (such as
 20 diabetes, hyperlipidemia and hypertension), and represents the first mapping of a gene for common stroke. Until now there have been no known linkage studies of stroke in humans showing any connection to this region of the chromosome. Based on the linkage studies conducted, Applicants have discovered a direct relationship between the PDE4D gene and stroke. Although the PDE4D gene (i.e., cDNA but
 25 not the genomic sequence) from normal individuals is known, there have been no studies directly investigating PDE4D and stroke. Moreover, there have been no variant forms reported that have been associated with stroke. The full sequence of the PDE4D gene and splice variants are reported herein. Additional single nucleotide polymorphisms are reported in Tables 9 and 10 and may not be shown in
 30 SEQ ID NO: 1.

NUCLEIC ACIDS OF THE INVENTION

Accordingly, the invention pertains to an isolated nucleic acid molecule comprising the human PDE4D gene having at least one nucleotide alteration and correlated with incidence of stroke. The term, "PDE4D or variant PDE4D", as used
5 herein, refers to an isolated nucleic acid molecule on chromosome 5q12 having at least one altered nucleotide that is associated with a susceptibility to a number of stroke phenotypes, and also to a portion or fragment of the isolated nucleic acid molecule (e.g., cDNA or the gene) that encodes PDE4D polypeptide (e.g., the polypeptide having SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14, optionally
10 comprising at least one SNP as set forth in Tables 9 and 10, or another splicing variant of a PDE4D polypeptide). In a preferred embodiment, the isolated nucleic acid molecule comprises SEQ ID NO:1 (shown in Appendix I) or the complement thereof. In another embodiment, the isolated nucleic acid molecule comprises the sequence of SEQ ID NO: 1 or the complement of SEQ ID NO: 1, except that one or
15 more single nucleotide polymorphisms as shown in Tables 9 and 10 are also present. In another embodiment, the isolated nucleic acid molecules comprises exon 4D6, 4D7-1, 4D7-2, 4D7-3 and 4D8.

The isolated nucleic acid molecules of the present invention can be RNA, for example, mRNA, or DNA, such as cDNA and genomic DNA. DNA molecules can
20 be double-stranded or single-stranded; single stranded RNA or DNA can be either the coding, or sense, strand or the non-coding, or antisense, strand. The nucleic acid molecule can include all or a portion of the coding sequence of the gene and can further comprise additional non-coding sequences such as introns and non-coding 3' and 5' sequences (including regulatory sequences, for example). Additionally, the
25 nucleic acid molecule can be fused to a marker sequence, for example, a sequence that encodes a polypeptide to assist in isolation or purification of the polypeptide. Such sequences include, but are not limited to, those which encode a glutathione-S-transferase (GST) fusion protein and those which encode a hemagglutinin A (HA) polypeptide marker from influenza.

30 An "isolated" nucleic acid molecule, as used herein, is one that is separated from nucleic acids which normally flank the gene or nucleotide sequence (as in

genomic sequences) and/or has been completely or partially purified from other transcribed sequences (e.g., as in an RNA library). For example, an isolated nucleic acid of the invention may be substantially isolated with respect to the complex cellular milieu in which it naturally occurs, or culture medium when produced by recombinant techniques, or chemical precursors or other chemicals when chemically synthesized. In some instances, the isolated material will form part of a composition (for example, a crude extract containing other substances), buffer system or reagent mix. In other circumstances, the material may be purified to essential homogeneity, for example as determined by PAGE or column chromatography such as HPLC.

5
10 Preferably, an isolated nucleic acid molecule comprises at least about 50, 80 or 90% (on a molar basis) of all macromolecular species present. With regard to genomic DNA, the term "isolated" also can refer to nucleic acid molecules which are separated from the chromosome with which the genomic DNA is naturally associated. For example, the isolated nucleic acid molecule can contain less than

15 about 5 kb, 4 kb, 3 kb, 2 kb, 1 kb, 0.5 kb or 0.1 kb of nucleotides which flank the nucleic acid molecule in the genomic DNA of the cell from which the nucleic acid molecule is derived.

The nucleic acid molecule can be fused to other coding or regulatory sequences and still be considered isolated. Thus, recombinant DNA contained in a

20 vector is included in the definition of "isolated" as used herein. Also, isolated nucleic acid molecules include recombinant DNA molecules in heterologous host cells, as well as partially or substantially purified DNA molecules in solution. "Isolated" nucleic acid molecules also encompass *in vivo* and *in vitro* RNA transcripts of the DNA molecules of the present invention. An isolated nucleic acid

25 molecule or nucleotide sequence can include a nucleic acid molecule or nucleotide sequence which is synthesized chemically or by recombinant means. Therefore, recombinant DNA contained in a vector are included in the definition of "isolated" as used herein. Also, isolated nucleotide sequences include recombinant DNA molecules in heterologous organisms, as well as partially or substantially purified

30 DNA molecules in solution. *In vivo* and *in vitro* RNA transcripts of the DNA molecules of the present invention are also encompassed by "isolated" nucleotide

sequences. Such isolated nucleotide sequences are useful in the manufacture of the encoded polypeptide, as probes for isolating homologous sequences (e.g., from other mammalian species), for gene mapping (e.g., by *in situ* hybridization with chromosomes), or for detecting expression of the gene in tissue (e.g., human tissue),
5 such as by Northern blot analysis.

The present invention also pertains to variant nucleic acid molecules which are not necessarily found in nature but which encode a PDE4D polypeptide (e.g., a polypeptide having the amino acid sequence of SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14, or another splicing variant of PDE4D polypeptide or polymorphic variant
10 thereof. Thus, for example, DNA molecules which comprise a sequence that is different from the naturally-occurring nucleotide sequence but which, due to the degeneracy of the genetic code, encode a PDE4D polypeptide of the present invention are also the subject of this invention. The invention also encompasses nucleotide sequences encoding portions (fragments), or encoding variant
15 polypeptides such as analogues or derivatives of the PDE4D polypeptide. Such variants can be naturally-occurring, such as in the case of allelic variation or single nucleotide polymorphisms, or non-naturally-occurring, such as those induced by various mutagens and mutagenic processes. Intended variations include, but are not limited to, addition, deletion and substitution of one or more nucleotides which can
20 result in conservative or non-conservative amino acid changes, including additions and deletions. Preferably the nucleotide (and/or resultant amino acid) changes are silent or conserved; that is, they do not alter the characteristics or activity of the PDE4D polypeptide. In one preferred embodiment, the nucleotide sequences are fragments that comprise one or more polymorphic microsatellite markers. In
25 another preferred embodiment, the nucleotide sequences are fragments that comprise one or more single nucleotide polymorphisms in the PDE4D gene.

Other alterations of the nucleic acid molecules of the invention can include, for example, labeling, methylation, internucleotide modifications such as uncharged linkages (e.g., methyl phosphonates, phosphotriesters, phosphoamidates,
30 carbamates), charged linkages (e.g., phosphorothioates, phosphorodithioates), pendent moieties (e.g., polypeptides), intercalators (e.g., acridine, psoralen),

chelators, alkylators, and modified linkages (e.g., alpha anomeric nucleic acids). Also included are synthetic molecules that mimic nucleic acid molecules in the ability to bind to a designated sequences via hydrogen bonding and other chemical interactions. Such molecules include, for example, those in which peptide linkages
5 substitute for phosphate linkages in the backbone of the molecule.

The invention also pertains to nucleic acid molecules which hybridize under high stringency hybridization conditions, such as for selective hybridization, to a nucleotide sequence described herein (e.g., nucleic acid molecules which specifically hybridize to a nucleotide sequence encoding polypeptides described
10 herein, and, optionally, have an activity of the polypeptide). In one embodiment, the invention includes variants described herein which hybridize under high stringency hybridization conditions (e.g., for selective hybridization) to a nucleotide sequence comprising a nucleotide sequence selected from SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Tables 9 and 10 or the
15 complement thereof. In another embodiment, the invention includes variants described herein which hybridize under high stringency hybridization conditions (e.g., for selective hybridization) to a nucleotide sequence encoding an amino acid sequence selected from SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14 or polymorphic variant thereof. In a preferred embodiment, the variant which
20 hybridizes under high stringency hybridizations has an activity of PDE4D.

Such nucleic acid molecules can be detected and/or isolated by specific hybridization (e.g., under high stringency conditions). "Specific hybridization," as used herein, refers to the ability of a first nucleic acid to hybridize to a second nucleic acid in a manner such that the first nucleic acid does not hybridize to any
25 nucleic acid other than to the second nucleic acid (e.g., when the first nucleic acid has a higher similarity to the second nucleic acid than to any other nucleic acid in a sample wherein the hybridization is to be performed). "Stringency conditions" for hybridization is a term of art which refers to the incubation and wash conditions, e.g., conditions of temperature and buffer concentration, which permit hybridization
30 of a particular nucleic acid to a second nucleic acid; the first nucleic acid may be perfectly (i.e., 100%) complementary to the second, or the first and second may

share some degree of complementarity which is less than perfect (e.g., 70%, 75%, 85%, 95%). For example, certain high stringency conditions can be used which distinguish perfectly complementary nucleic acids from those of less complementarity. "High stringency conditions", "moderate stringency conditions" and "low stringency conditions" for nucleic acid hybridizations are explained on pages 2.10.1-2.10.16 and pages 6.3.1-6.3.6 in *Current Protocols in Molecular Biology* (Ausubel, F.M. *et al.*, "Current Protocols in Molecular Biology", John Wiley & Sons, (1998), the entire teachings of which are incorporated by reference herein). The exact conditions which determine the stringency of hybridization depend not only on ionic strength (e.g., 0.2XSSC, 0.1XSSC), temperature (e.g., room temperature, 42°C, 68°C) and the concentration of destabilizing agents such as formamide or denaturing agents such as SDS, but also on factors such as the length of the nucleic acid sequence, base composition, percent mismatch between hybridizing sequences and the frequency of occurrence of subsets of that sequence within other non-identical sequences. Thus, equivalent conditions can be determined by varying one or more of these parameters while maintaining a similar degree of identity or similarity between the two nucleic acid molecules. Typically, conditions are used such that sequences at least about 60%, at least about 70%, at least about 80%, at least about 90% or at least about 95% or more identical to each other remain hybridized to one another. By varying hybridization conditions from a level of stringency at which no hybridization occurs to a level at which hybridization is first observed, conditions which will allow a given sequence to hybridize (e.g., selectively) with the most similar sequences in the sample can be determined.

Exemplary conditions are described in Krause, M.H. and S.A. Aaronson, *Methods in Enzymology*, 200:546-556 (1991). Also, in, Ausubel, *et al.*, "Current Protocols in Molecular Biology", John Wiley & Sons, (1998), which describes the determination of washing conditions for moderate or low stringency conditions. Washing is the step in which conditions are usually set so as to determine a minimum level of complementarity of the hybrids. Generally, starting from the lowest temperature at which only homologous hybridization occurs, each °C by

which the final wash temperature is reduced (holding SSC concentration constant) allows an increase by 1% in the maximum extent of mismatching among the sequences that hybridize. Generally, doubling the concentration of SSC results in an increase in T_m of $\sim 17^\circ\text{C}$. Using these guidelines, the washing temperature can be
5 determined empirically for high, moderate or low stringency, depending on the level of mismatch sought.

For example, a low stringency wash can comprise washing in a solution containing 0.2XSSC/0.1% SDS for 10 min at room temperature; a moderate stringency wash can comprise washing in a prewarmed solution (42°C) solution
10 containing 0.2XSSC/0.1% SDS for 15 min at 42°C ; and a high stringency wash can comprise washing in prewarmed (68°C) solution containing 0.1XSSC/0.1%SDS for 15 min at 68°C . Furthermore, washes can be performed repeatedly or sequentially to obtain a desired result as known in the art. Equivalent conditions can be determined by varying one or more of the parameters given as an example, as known in the art,
15 while maintaining a similar degree of identity or similarity between the target nucleic acid molecule and the primer or probe used.

The percent identity of two nucleotide or amino acid sequences can be determined by aligning the sequences for optimal comparison purposes (*e.g.*, gaps can be introduced in the sequence of a first sequence). The nucleotides or amino
20 acids at corresponding positions are then compared, and the percent identity between the two sequences is a function of the number of identical positions shared by the sequences (*i.e.*, % identity = # of identical positions/total # of positions x 100). In certain embodiments, the length of a sequence aligned for comparison purposes is at least 30%, preferably at least 40%, more preferably at least 60%, and even more
25 preferably at least 70%, 80%, 90% or 95% of the length of the reference sequence. The actual comparison of the two sequences can be accomplished by well-known methods, for example, using a mathematical algorithm. A preferred, non-limiting example of such a mathematical algorithm is described in Karlin *et al.*, *Proc. Natl. Acad. Sci. USA*, 90:5873-5877 (1993). Such an algorithm is incorporated into the
30 NBLAST and XBLAST programs (version 2.0) as described in Altschul *et al.*, *Nucleic Acids Res.*, 25:389-3402 (1997). When utilizing BLAST and Gapped

BLAST programs, the default parameters of the respective programs (*e.g.*, NBLAST) can be used. See <http://www.ncbi.nlm.nih.gov>. In one embodiment, parameters for sequence comparison can be set at score=100, wordlength=12, or can be varied (*e.g.*, W=5 or W=20).

- 5 Another preferred, non-limiting example of a mathematical algorithm utilized for the comparison of sequences is the algorithm of Myers and Miller, CABIOS (1989). Such an algorithm is incorporated into the ALIGN program (version 2.0) which is part of the GCG sequence alignment software package. When utilizing the ALIGN program for comparing amino acid sequences, a PAM120
- 10 weight residue table, a gap length penalty of 12, and a gap penalty of 4 can be used. Additional algorithms for sequence analysis are known in the art and include ADVANCE and ADAM as described in Torellis and Robotti (1994) *Comput. Appl. Biosci.*, 10:3-5; and FASTA described in Pearson and Lipman (1988) *PNAS*, 85:2444-8.
- 15 In another embodiment, the percent identity between two amino acid sequences can be accomplished using the GAP program in the CGC software package (available at <http://www.cgc.com>) using either a Blossom 63 matrix or a PAM250 matrix, and a gap weight of 12, 10, 8, 6, or 4 and a length weight of 2, 3, or
- 20 4. In yet another embodiment, the percent identity between two nucleic acid sequences can be accomplished using the GAP program in the GCG software package (available at <http://www.accelrys.com>), using a gap weight of 50 and a length weight of 3.

- The present invention also provides isolated nucleic acid molecules that contain a fragment or portion that hybridizes under highly stringent conditions to a
- 25 nucleotide sequence comprising a nucleotide sequence selected from SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Tables 9 and 10 and the complement thereof, and also provides isolated nucleic acid molecules that contain a fragment or portion that hybridizes under highly stringent conditions to a nucleotide sequence encoding an amino acid sequence selected from SEQ ID
- 30 NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14, or polymorphic variant thereof. The nucleic acid fragments of the invention are at least about 15, preferably at least about 18, 20,

23 or 25 nucleotides, and can be 30, 40, 50, 100, 200 or more nucleotides in length. Longer fragments, for example, 30 or more nucleotides in length, which encode antigenic polypeptides described herein are particularly useful, such as for the generation of antibodies as described below.

5 In a related aspect, the nucleic acid fragments of the invention are used as probes or primers in assays such as those described herein. "Probes" or "primers" are oligonucleotides that hybridize in a base-specific manner to a complementary strand of nucleic acid molecules. Such probes and primers include polypeptide nucleic acids, as described in Nielsen *et al.*, *Science*, 254, 1497-1500 (1991).

10 Typically, a probe or primer comprises a region of nucleotide sequence that hybridizes to at least about 15, typically about 20-25, and more typically about 40, 50 or 75, consecutive nucleotides of a nucleic acid molecule comprising a contiguous nucleotide sequence selected from: SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Tables 9 and 10, the complement
15 thereof, or a sequence encoding an amino acid sequence selected from SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14, or polymorphic variant thereof. In preferred embodiments, a probe or primer comprises 100 or fewer nucleotides, preferably from 6 to 50 nucleotides, preferably from 12 to 30 nucleotides. In other
20 embodiments, the probe or primer is at least 70% identical to the contiguous nucleotide sequence or to the complement of the contiguous nucleotide sequence, preferably at least 80% identical, more preferably at least 90% identical, even more preferably at least 95% identical, or even capable of selectively hybridizing to the contiguous nucleotide sequence or to the complement of the contiguous nucleotide sequence. Often, the probe or primer further comprises a label, *e.g.*, radioisotope,
25 fluorescent compound, enzyme, or enzyme co-factor.

The nucleic acid molecules of the invention such as those described above can be identified and isolated using standard molecular biology techniques and the sequence information provided herein. For example, nucleic acid molecules can be amplified and isolated by the polymerase chain reaction using synthetic
30 oligonucleotide primers designed based on one or more of the sequences provided in SEQ ID NO: 1 which may optionally comprise at least one polymorphism shown in

Tables 9 and 10, and/or the complement thereof, or designed based on nucleotides based on sequences encoding one or more of the amino acid sequences provided herein. See generally *PCR Technology: Principles and Applications for DNA Amplification* (ed. H.A. Erlich, Freeman Press, NY, NY, 1992); *PCR Protocols: A*
5 *Guide to Methods and Applications* (Eds. Innis, *et al.*, Academic Press, San Diego, CA, 1990); Mattila *et al.*, *Nucleic Acids Res.*, 19:4967 (1991); Eckert *et al.*, *PCR Methods and Applications*, 1:17 (1991); PCR (eds. McPherson *et al.*, IRL Press, Oxford); and U.S. Patent 4,683,202. The nucleic acid molecules can be amplified using cDNA, mRNA or genomic DNA as a template, cloned into an appropriate
10 vector and characterized by DNA sequence analysis.

Other suitable amplification methods include the ligase chain reaction (LCR) (see Wu and Wallace, *Genomics*, 4:560 (1989), Landegren *et al.*, *Science*, 241:1077 (1988), transcription amplification (Kwoh *et al.*, *Proc. Natl. Acad. Sci. USA*, 86:1173 (1989)), and self-sustained sequence replication (Guatelli *et al.*, *Proc. Nat.*
15 *Acad. Sci. USA*, 87:1874 (1990)) and nucleic acid based sequence amplification (NASBA). The latter two amplification methods involve isothermal reactions based on isothermal transcription, which produce both single stranded RNA (ssRNA) and double stranded DNA (dsDNA) as the amplification products in a ratio of about 30 or 100 to 1, respectively.

20 The amplified DNA can be radiolabelled and used as a probe for screening a cDNA library derived from human cells, mRNA in zap express, ZIPLOX or other suitable vector. Corresponding clones can be isolated, DNA can obtained following *in vivo* excision, and the cloned insert can be sequenced in either or both orientations by art recognized methods to identify the correct reading frame encoding a
25 polypeptide of the appropriate molecular weight. For example, the direct analysis of the nucleotide sequence of nucleic acid molecules of the present invention can be accomplished using well-known methods that are commercially available. See, for example, Sambrook *et al.*, *Molecular Cloning, A Laboratory Manual* (2nd Ed., CSHP, New York 1989); Zyskind *et al.*, *Recombinant DNA Laboratory Manual*,
30 (Acad. Press, 1988)). Using these or similar methods, the polypeptide and the DNA encoding the polypeptide can be isolated, sequenced and further characterized.

Antisense nucleic acid molecules of the invention can be designed using the nucleotide sequences of SEQ ID NO: 1 and/or the complement of SEQ ID NO: 1, and/or a portion of SEQ ID NO:1 or the complement of SEQ ID NO:1 and/or a sequence encoding the amino acid sequences or SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 and/or 14, or encoding a portion of SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 and/or 14, (wherein any one of these may optionally comprise at least one polymorphism as shown in Tables 9 and 10) and constructed using chemical synthesis and enzymatic ligation reactions using procedures known in the art. For example, an antisense nucleic acid molecule (*e.g.*, an antisense oligonucleotide) can be chemically synthesized using naturally occurring nucleotides or variously modified nucleotides designed to increase the biological stability of the molecules or to increase the physical stability of the duplex formed between the antisense and sense nucleic acids, *e.g.*, phosphorothioate derivatives and acridine substituted nucleotides can be used. Alternatively, the antisense nucleic acid molecule can be produced biologically using an expression vector into which a nucleic acid molecule has been subcloned in an antisense orientation (*i.e.*, RNA transcribed from the inserted nucleic acid molecule will be of an antisense orientation to a target nucleic acid of interest).

In general, the isolated nucleic acid sequences of the invention can be used as molecular weight markers on Southern gels, and as chromosome markers which are labeled to map related gene positions. The nucleic acid sequences can also be used to compare with endogenous DNA sequences in patients to identify genetic disorders (*e.g.*, a predisposition for or susceptibility to stroke), and as probes, such as to hybridize and discover related DNA sequences or to subtract out known sequences from a sample. The nucleic acid sequences can further be used to derive primers for genetic fingerprinting, to raise anti-polypeptide antibodies using DNA immunization techniques, and as an antigen to raise anti-DNA antibodies or elicit immune responses. Portions or fragments of the nucleotide sequences identified herein (and the corresponding complete gene sequences) can be used in numerous ways as polynucleotide reagents. For example, these sequences can be used to: (i) map their respective genes on a chromosome; and, thus, locate gene regions

associated with genetic disease; (ii) identify an individual from a minute biological sample (tissue typing); and (iii) aid in forensic identification of a biological sample. Additionally, the nucleotide sequences of the invention can be used to identify and express recombinant polypeptides for analysis, characterization or therapeutic use, or
5 as markers for tissues in which the corresponding polypeptide is expressed, either constitutively, during tissue differentiation, or in diseased states. The nucleic acid sequences can additionally be used as reagents in the screening and/or diagnostic assays described herein, and can also be included as components of kits (e.g., reagent kits) for use in the screening and/or diagnostic assays described herein.

10 Another aspect of the invention pertains to nucleic acid constructs containing a nucleic acid molecule selected from the group consisting of SEQ ID NO: 1 which may optionally comprise at least one polymorphism shown in Tables 9 and 10 and the complement thereof (or a portion thereof). Yet another aspect of the invention pertains to nucleic acid constructs containing a nucleic acid molecule encoding the
15 amino acid sequence of SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14 or polymorphic variant thereof. The constructs comprise a vector (e.g., an expression vector) into which a sequence of the invention has been inserted in a sense or antisense orientation. As used herein, the term "vector" refers to a nucleic acid molecule capable of transporting another nucleic acid to which it has been linked.
20 One type of vector is a "plasmid", which refers to a circular double stranded DNA loop into which additional DNA segments can be ligated. Another type of vector is a viral vector, wherein additional DNA segments can be ligated into the viral genome. Certain vectors are capable of autonomous replication in a host cell into which they are introduced (e.g., bacterial vectors having a bacterial origin of
25 replication and episomal mammalian vectors). Other vectors (e.g., non-episomal mammalian vectors) are integrated into the genome of a host cell upon introduction into the host cell, and thereby are replicated along with the host genome. Moreover, certain vectors, expression vectors, are capable of directing the expression of genes to which they are operably linked. In general, expression vectors of utility in
30 recombinant DNA techniques are often in the form of plasmids. However, the invention is intended to include such other forms of expression vectors, such as viral

vectors (*e.g.*, replication defective retroviruses, adenoviruses and adeno-associated viruses) that serve equivalent functions.

Preferred recombinant expression vectors of the invention comprise a nucleic acid molecule of the invention in a form suitable for expression of the nucleic acid molecule in a host cell. This means that the recombinant expression vectors include one or more regulatory sequences, selected on the basis of the host cells to be used for expression, which is operably linked to the nucleic acid sequence to be expressed. Within a recombinant expression vector, "operably or operatively linked" is intended to mean that the nucleotide sequence of interest is linked to the regulatory sequence(s) in a manner which allows for expression of the nucleotide sequence (*e.g.*, in an *in vitro* transcription/translation system or in a host cell when the vector is introduced into the host cell). The term "regulatory sequence" is intended to include promoters, enhancers and other expression control elements (*e.g.*, polyadenylation signals). Such regulatory sequences are described, for example, in Goeddel, *Gene Expression Technology: Methods in Enzymology* 185, Academic Press, San Diego, CA (1990). Regulatory sequences include those which direct constitutive expression of a nucleotide sequence in many types of host cell and those which direct expression of the nucleotide sequence only in certain host cells (*e.g.*, tissue-specific regulatory sequences). It will be appreciated by those skilled in the art that the design of the expression vector can depend on such factors as the choice of the host cell to be transformed and the level of expression of polypeptide desired. The expression vectors of the invention can be introduced into host cells to thereby produce polypeptides, including fusion polypeptides, encoded by nucleic acid molecules as described herein.

The recombinant expression vectors of the invention can be designed for expression of a polypeptide of the invention in prokaryotic or eukaryotic cells, *e.g.*, bacterial cells such as *E. coli*, insect cells (using baculovirus expression vectors), yeast cells or mammalian cells. Suitable host cells are discussed further in Goeddel, *supra*. Alternatively, the recombinant expression vector can be transcribed and translated *in vitro*, for example using T7 promoter regulatory sequences and T7 polymerase.

Another aspect of the invention pertains to host cells into which a recombinant expression vector of the invention has been introduced. The terms "host cell" and "recombinant host cell" are used interchangeably herein. It is understood that such terms refer not only to the particular subject cell but also to the progeny or potential progeny of such a cell. Because certain modifications may occur in succeeding generations due to either mutation or environmental influences, such progeny may not, in fact, be identical to the parent cell, but are still included within the scope of the term as used herein.

A host cell can be any prokaryotic or eukaryotic cell. For example, a nucleic acid molecule of the invention can be expressed in bacterial cells (*e.g.*, *E. coli*), insect cells, yeast or mammalian cells (such as Chinese hamster ovary cells (CHO) or COS cells). Other suitable host cells are known to those skilled in the art.

Vector DNA can be introduced into prokaryotic or eukaryotic cells via conventional transformation or transfection techniques. As used herein, the terms "transformation" and "transfection" are intended to refer to a variety of art-recognized techniques for introducing a foreign nucleic acid molecule (*e.g.*, DNA) into a host cell, including calcium phosphate or calcium chloride co-precipitation, DEAE-dextran-mediated transfection, lipofection, or electroporation. Suitable methods for transforming or transfecting host cells can be found in Sambrook, *et al.* (*supra*), and other laboratory manuals.

For stable transfection of mammalian cells, it is known that, depending upon the expression vector and transfection technique used, only a small fraction of cells may integrate the foreign DNA into their genome. In order to identify and select these integrants, a gene that encodes a selectable marker (*e.g.*, for resistance to antibiotics) is generally introduced into the host cells along with the gene of interest. Preferred selectable markers include those that confer resistance to drugs, such as G418, hygromycin and methotrexate. Nucleic acid molecules encoding a selectable marker can be introduced into a host cell on the same vector as the nucleic acid molecule of the invention or can be introduced on a separate vector. Cells stably transfected with the introduced nucleic acid molecule can be identified by drug

selection (*e.g.*, cells that have incorporated the selectable marker gene will survive, while the other cells die).

A host cell of the invention, such as a prokaryotic or eukaryotic host cell in culture, can be used to produce (*i.e.*, express) a polypeptide of the invention.

5 Accordingly, the invention further provides methods for producing a polypeptide using the host cells of the invention. In one embodiment, the method comprises culturing the host cell of invention (into which a recombinant expression vector encoding a polypeptide of the invention has been introduced) in a suitable medium such that the polypeptide is produced. In another embodiment, the method further
10 comprises isolating the polypeptide from the medium or the host cell.

The host cells of the invention can also be used to produce nonhuman transgenic animals. For example, in one embodiment, a host cell of the invention is a fertilized oocyte or an embryonic stem cell into which a nucleic acid molecule of the invention has been introduced (*e.g.*, an exogenous PDE4D gene, or an exogenous
15 nucleic acid encoding PDE4D polypeptide). Such host cells can then be used to create non-human transgenic animals in which exogenous nucleotide sequences have been introduced into the genome or homologous recombinant animals in which endogenous nucleotide sequences have been altered. Such animals are useful for studying the function and/or activity of the nucleotide sequence and polypeptide
20 encoded by the sequence and for identifying and/or evaluating modulators of their activity. As used herein, a "transgenic animal" is a non-human animal, preferably a mammal, more preferably a rodent such as a rat or mouse, in which one or more of the cells of the animal includes a transgene. Other examples of transgenic animals include non-human primates, sheep, dogs, cows, goats, chickens and amphibians. A
25 transgene is exogenous DNA which is integrated into the genome of a cell from which a transgenic animal develops and which remains in the genome of the mature animal, thereby directing the expression of an encoded gene product in one or more cell types or tissues of the transgenic animal. As used herein, an "homologous recombinant animal" is a non-human animal, preferably a mammal, more preferably
30 a mouse, in which an endogenous gene has been altered by homologous recombination between the endogenous gene and an exogenous DNA molecule

introduced into a cell of the animal, e.g., an embryonic cell of the animal, prior to development of the animal.

Methods for generating transgenic animals via embryo manipulation and microinjection, particularly animals such as mice, have become conventional in the art and are described, for example, in U.S. Patent Nos. 4,736,866 and 4,870,009, 5 U.S. Patent No. 4,873,191 and in Hogan, *Manipulating the Mouse Embryo* (Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y., 1986). Methods for constructing homologous recombination vectors and homologous recombinant animals are described further in Bradley (1991) *Current Opinion in Bio/Technology*, 10 2:823-829 and in PCT Publication Nos. WO 90/11354, WO 91/01140, WO 92/0968, and WO 93/04169. Clones of the non-human transgenic animals described herein can also be produced according to the methods described in Wilmut *et al.* (1997) *Nature*, 385:810-813 and PCT Publication Nos. WO 97/07668 and WO 97/07669.

POLYPEPTIDES OF THE INVENTION

15 The present invention also pertains to isolated polypeptides encoded by PDE4D ("PDE4D polypeptides") and fragments and variants thereof, as well as polypeptides encoded by nucleotide sequences described herein (e.g., other splicing variants). The term "polypeptide" refers to a polymer of amino acids, and not to a specific length; thus, peptides, oligopeptides and proteins are included within the 20 definition of a polypeptide. As used herein, a polypeptide is said to be "isolated" or "purified" when it is substantially free of cellular material when it is isolated from recombinant and non-recombinant cells, or free of chemical precursors or other chemicals when it is chemically synthesized. A polypeptide, however, can be joined to another polypeptide with which it is not normally associated in a cell (e.g., in a 25 "fusion protein") and still be "isolated" or "purified."

The polypeptides of the invention can be purified to homogeneity. It is understood, however, that preparations in which the polypeptide is not purified to homogeneity are useful. The critical feature is that the preparation allows for the desired function of the polypeptide, even in the presence of considerable amounts of 30 other components. Thus, the invention encompasses various degrees of purity. In

one embodiment, the language "substantially free of cellular material" includes preparations of the polypeptide having less than about 30% (by dry weight) other proteins (*i.e.*, contaminating protein), less than about 20% other proteins, less than about 10% other proteins, or less than about 5% other proteins.

5 When a polypeptide is recombinantly produced, it can also be substantially free of culture medium, *i.e.*, culture medium represents less than about 20%, less than about 10%, or less than about 5% of the volume of the polypeptide preparation. The language "substantially free of chemical precursors or other chemicals" includes preparations of the polypeptide in which it is separated from chemical precursors or
10 other chemicals that are involved in its synthesis. In one embodiment, the language "substantially free of chemical precursors or other chemicals" includes preparations of the polypeptide having less than about 30% (by dry weight) chemical precursors or other chemicals, less than about 20% chemical precursors or other chemicals, less than about 10% chemical precursors or other chemicals, or less than about 5%
15 chemical precursors or other chemicals.

 In one embodiment, a polypeptide of the invention comprises an amino acid sequence encoded by a nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of SEQ ID NO: 1 which may optionally comprise at least one polymorphism shown in Tables 9 and 10 and complements and portions
20 thereof, *e.g.*, SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14, or a portion or polymorphic variant thereof. However, the polypeptides of the invention also encompass fragment and sequence variants. Variants include a substantially homologous polypeptide encoded by the same genetic locus in an organism, *i.e.*, an allelic variant, as well as other splicing variants. Variants also encompass
25 polypeptides derived from other genetic loci in an organism, but having substantial homology to a polypeptide encoded by a nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of SEQ ID NO: 1 which may optionally comprise at least one polymorphism shown in Tables 9 and 10 and complements and portions thereof, or having substantial homology to a polypeptide
30 encoded by a nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of nucleotide sequences encoding SEQ ID NO: 2, 3, 4, 5, 6, 7,

8, 9, 10, 12 or 14, or polymorphic variants thereof. Variants also include polypeptides substantially homologous or identical to these polypeptides but derived from another organism, *i.e.*, an ortholog. Variants also include polypeptides that are substantially homologous or identical to these polypeptides that are produced by chemical synthesis. Variants also include polypeptides that are substantially homologous or identical to these polypeptides that are produced by recombinant methods.

As used herein, two polypeptides (or a region of the polypeptides) are substantially homologous or identical when the amino acid sequences are at least about 45-55%, typically at least about 70-75%, more typically at least about 80-85%, and most typically greater than about 90% or more homologous or identical. A substantially homologous amino acid sequence, according to the present invention, will be encoded by a nucleic acid molecule hybridizing to SEQ ID NO: 1 which may optionally comprise at least one polymorphism shown in Tables 9 and 10, or portion thereof, under stringent conditions as more particularly described above, or will be encoded by a nucleic acid molecule hybridizing to a nucleic acid sequence encoding SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14, portion thereof or polymorphic variant thereof, under stringent conditions as more particularly described thereof.

To determine the percent homology or identity of two amino acid sequences, or of two nucleic acid sequences, the sequences are aligned for optimal comparison purposes (*e.g.*, gaps can be introduced in the sequence of one polypeptide or nucleic acid molecule for optimal alignment with the other polypeptide or nucleic acid molecule). The amino acid residues or nucleotides at corresponding amino acid positions or nucleotide positions are then compared. When a position in one sequence is occupied by the same amino acid residue or nucleotide as the corresponding position in the other sequence, then the molecules are homologous at that position. As used herein, amino acid or nucleic acid "homology" is equivalent to amino acid or nucleic acid "identity". The percent homology between the two sequences is a function of the number of identical positions shared by the sequences (*i.e.*, percent homology equals the number of identical positions/total number of positions times 100).

The invention also encompasses polypeptides having a lower degree of identity but having sufficient similarity so as to perform one or more of the same functions performed by a polypeptide encoded by a nucleic acid molecule of the invention. Similarity is determined by conserved amino acid substitution. Such
5 substitutions are those that substitute a given amino acid in a polypeptide by another amino acid of like characteristics. Conservative substitutions are likely to be phenotypically silent. Typically seen as conservative substitutions are the replacements, one for another, among the aliphatic amino acids Ala, Val, Leu and Ile; interchange of the hydroxyl residues Ser and Thr, exchange of the acidic
10 residues Asp and Glu, substitution between the amide residues Asn and Gln, exchange of the basic residues Lys and Arg and replacements among the aromatic residues Phe and Tyr. Guidance concerning which amino acid changes are likely to be phenotypically silent are found in Bowie *et al.*, *Science* 247:1306-1310 (1990).

A variant polypeptide can differ in amino acid sequence by one or more
15 substitutions, deletions, insertions, inversions, fusions, and truncations or a combination of any of these. Further, variant polypeptides can be fully functional or can lack function in one or more activities. Fully functional variants typically contain only conservative variation or variation in non-critical residues or in non-critical regions. Functional variants can also contain substitution of similar
20 amino acids that result in no change or an insignificant change in function. Alternatively, such substitutions may positively or negatively affect function to some degree. Non-functional variants typically contain one or more non-conservative amino acid substitutions, deletions, insertions, inversions, or truncation or a substitution, insertion, inversion, or deletion in a critical residue or critical region.

25 Amino acids that are essential for function can be identified by methods known in the art, such as site-directed mutagenesis or alanine-scanning mutagenesis (Cunningham *et al.*, *Science*, 244:1081-1085 (1989)). The latter procedure introduces single alanine mutations at every residue in the molecule. The resulting mutant molecules are then tested for biological activity *in vitro*, or *in vitro*
30 proliferative activity. Sites that are critical for polypeptide activity can also be determined by structural analysis such as crystallization, nuclear magnetic resonance

or photoaffinity labeling (Smith *et al.*, *J. Mol. Biol.*, 224:899-904 (1992); de Vos *et al.*, *Science*, 255:306-312 (1992)).

The invention also includes polypeptide fragments of the polypeptides of the invention. Fragments can be derived from a polypeptide encoded by a nucleic acid molecule comprising SEQ ID NO: 1 which may optionally comprise at least one polymorphism shown in Tables 9 and 10 or a portion thereof and the complements thereof (e.g., SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14, or other splicing variants). However, the invention also encompasses fragments of the variants of the polypeptides described herein. As used herein, a fragment comprises at least 6 contiguous amino acids. Useful fragments include those that retain one or more of the biological activities of the polypeptide as well as fragments that can be used as an immunogen to generate polypeptide-specific antibodies.

Biologically active fragments (peptides which are, for example, 6, 9, 12, 15, 16, 20, 30, 35, 36, 37, 38, 39, 40, 50, 100 or more amino acids in length) can comprise a domain, segment, or motif that has been identified by analysis of the polypeptide sequence using well-known methods, e.g., signal peptides, extracellular domains, one or more transmembrane segments or loops, ligand binding regions, zinc finger domains, DNA binding domains, acylation sites, glycosylation sites, or phosphorylation sites.

Fragments can be discrete (not fused to other amino acids or polypeptides) or can be within a larger polypeptide. Further, several fragments can be comprised within a single larger polypeptide. In one embodiment a fragment designed for expression in a host can have heterologous pre- and pro-polypeptide regions fused to the amino terminus of the polypeptide fragment and an additional region fused to the carboxyl terminus of the fragment.

The invention thus provides chimeric or fusion polypeptides. These comprise a polypeptide of the invention operatively linked to a heterologous protein or polypeptide having an amino acid sequence not substantially homologous to the polypeptide. "Operatively linked" indicates that the polypeptide and the heterologous protein are fused in-frame. The heterologous protein can be fused to the N-terminus or C-terminus of the polypeptide. In one embodiment the fusion

polypeptide does not affect function of the polypeptide *per se*. For example, the fusion polypeptide can be a GST-fusion polypeptide in which the polypeptide sequences are fused to the C-terminus of the GST sequences. Other types of fusion polypeptides include, but are not limited to, enzymatic fusion polypeptides, for example β -galactosidase fusions, yeast two-hybrid GAL fusions, poly-His fusions and Ig fusions. Such fusion polypeptides, particularly poly-His fusions, can facilitate the purification of recombinant polypeptide. In certain host cells (*e.g.*, mammalian host cells), expression and/or secretion of a polypeptide can be increased by using a heterologous signal sequence. Therefore, in another embodiment, the fusion polypeptide contains a heterologous signal sequence at its N-terminus.

EP-A-O 464 533 discloses fusion proteins comprising various portions of immunoglobulin constant regions. The Fc is useful in therapy and diagnosis and thus results, for example, in improved pharmacokinetic properties (EP-A 0232 262). In drug discovery, for example, human proteins have been fused with Fc portions for the purpose of high-throughput screening assays to identify antagonists. Bennett *et al.*, *Journal of Molecular Recognition*, 8:52-58 (1995) and Johanson *et al.*, *The Journal of Biological Chemistry*, 270,16:9459-9471 (1995). Thus, this invention also encompasses soluble fusion polypeptides containing a polypeptide of the invention and various portions of the constant regions of heavy or light chains of immunoglobulins of various subclass (IgG, IgM, IgA, IgE).

A chimeric or fusion polypeptide can be produced by standard recombinant DNA techniques. For example, DNA fragments coding for the different polypeptide sequences are ligated together in-frame in accordance with conventional techniques. In another embodiment, the fusion gene can be synthesized by conventional techniques including automated DNA synthesizers. Alternatively, PCR amplification of nucleic acid fragments can be carried out using anchor primers which give rise to complementary overhangs between two consecutive nucleic acid fragments which can subsequently be annealed and re-amplified to generate a chimeric nucleic acid sequence (see Ausubel *et al.*, *Current Protocols in Molecular Biology*, 1992). Moreover, many expression vectors are commercially available that already encode a

fusion moiety (*e.g.*, a GST protein). A nucleic acid molecule encoding a polypeptide of the invention can be cloned into such an expression vector such that the fusion moiety is linked in-frame to the polypeptide.

The isolated polypeptide can be purified from cells that naturally express it, 5 purified from cells that have been altered to express it (recombinant), or synthesized using known protein synthesis methods. In one embodiment, the polypeptide is produced by recombinant DNA techniques. For example, a nucleic acid molecule encoding the polypeptide is cloned into an expression vector, the expression vector introduced into a host cell and the polypeptide expressed in the host cell. The 10 polypeptide can then be isolated from the cells by an appropriate purification scheme using standard protein purification techniques.

In general, polypeptides of the present invention can be used as a molecular weight marker on SDS-PAGE gels or on molecular sieve gel filtration columns using art-recognized methods. The polypeptides of the present invention can be 15 used to raise antibodies or to elicit an immune response. The polypeptides can also be used as a reagent, *e.g.*, a labeled reagent, in assays to quantitatively determine levels of the polypeptide or a molecule to which it binds (*e.g.*, a receptor or a ligand) in biological fluids. The polypeptides can also be used as markers for cells or tissues in which the corresponding polypeptide is preferentially expressed, either 20 constitutively, during tissue differentiation, or in a diseased state. The polypeptides can be used to isolate a corresponding binding agent, *e.g.*, receptor or ligand, such as, for example, in an interaction trap assay, and to screen for peptide or small molecule antagonists or agonists of the binding interaction.

ANTIBODIES OF THE INVENTION

25 Polyclonal and/or monoclonal antibodies that specifically bind one form of the gene product but not to the other form of the gene product are also provided. Antibodies are also provided that bind a portion of either the variant or the reference gene product that contains the polymorphic site or sites. The invention provides antibodies to the polypeptides and polypeptide fragments of the invention, *e.g.*, 30 having an amino acid sequence encoded by SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12

or 14, or a portion thereof, or having an amino acid sequence encoded by a nucleic acid molecule comprising all or a portion of SEQ ID NO: 1 which may optionally comprise at least one polymorphism shown in Tables 9 and 10 (e.g., SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14, or another splicing variant or portion thereof). The term "antibody" as used herein refers to immunoglobulin molecules and immunologically active portions of immunoglobulin molecules, *i.e.*, molecules that contain an antigen binding site that specifically binds an antigen. A molecule that specifically binds to a polypeptide of the invention is a molecule that binds to that polypeptide or a fragment thereof, but does not substantially bind other molecules in a sample, *e.g.*, a biological sample, which naturally contains the polypeptide. Examples of immunologically active portions of immunoglobulin molecules include F(ab) and F(ab')₂ fragments which can be generated by treating the antibody with an enzyme such as pepsin. The invention provides polyclonal and monoclonal antibodies that bind to a polypeptide of the invention. The term "monoclonal antibody" or "monoclonal antibody composition", as used herein, refers to a population of antibody molecules that contain only one species of an antigen binding site capable of immunoreacting with a particular epitope of a polypeptide of the invention. A monoclonal antibody composition thus typically displays a single binding affinity for a particular polypeptide of the invention with which it immunoreacts.

Polyclonal antibodies can be prepared as described above by immunizing a suitable subject with a desired immunogen, *e.g.*, polypeptide of the invention or fragment thereof. The antibody titer in the immunized subject can be monitored over time by standard techniques, such as with an enzyme linked immunosorbent assay (ELISA) using immobilized polypeptide. If desired, the antibody molecules directed against the polypeptide can be isolated from the mammal (*e.g.*, from the blood) and further purified by well-known techniques, such as protein A chromatography to obtain the IgG fraction. At an appropriate time after immunization, *e.g.*, when the antibody titers are highest, antibody-producing cells can be obtained from the subject and used to prepare monoclonal antibodies by standard techniques, such as the hybridoma technique originally described by Kohler

and Milstein (1975) *Nature*, 256:495-497, the human B cell hybridoma technique (Kozbor *et al.* (1983) *Immunol. Today*, 4:72), the EBV-hybridoma technique (Cole *et al.* (1985), *Monoclonal Antibodies and Cancer Therapy*, Alan R. Liss, Inc., pp. 77-96) or trioma techniques. The technology for producing hybridomas is well
5 known (see generally *Current Protocols in Immunology* (1994) Coligan *et al.* (eds.) John Wiley & Sons, Inc., New York, NY). Briefly, an immortal cell line (typically a myeloma) is fused to lymphocytes (typically splenocytes) from a mammal immunized with an immunogen as described above, and the culture supernatants of the resulting hybridoma cells are screened to identify a hybridoma producing a
10 monoclonal antibody that binds a polypeptide of the invention.

Any of the many well known protocols used for fusing lymphocytes and immortalized cell lines can be applied for the purpose of generating a monoclonal antibody to a polypeptide of the invention (see, *e.g.*, *Current Protocols in Immunology*, *supra*; Galfre *et al.* (1977) *Nature*, 266:55052; R.H. Kenneth, in
15 *Monoclonal Antibodies: A New Dimension In Biological Analyses*, Plenum Publishing Corp., New York, New York (1980); and Lerner (1981) *Yale J. Biol. Med.*, 54:387-402. Moreover, the ordinarily skilled worker will appreciate that there are many variations of such methods that also would be useful.

Alternative to preparing monoclonal antibody-secreting hybridomas, a
20 monoclonal antibody to a polypeptide of the invention can be identified and isolated by screening a recombinant combinatorial immunoglobulin library (*e.g.*, an antibody phage display library) with the polypeptide to thereby isolate immunoglobulin library members that bind the polypeptide. Kits for generating and screening phage display libraries are commercially available (*e.g.*, the Pharmacia *Recombinant Phage*
25 *Antibody System*, Catalog No. 27-9400-01; and the Stratagene *SurfZAP™* Phage Display Kit, Catalog No. 240612). Additionally, examples of methods and reagents particularly amenable for use in generating and screening antibody display library can be found in, for example, U.S. Patent No. 5,223,409; PCT Publication No. WO 92/18619; PCT Publication No. WO 91/17271; PCT Publication No. WO 92/20791;
30 PCT Publication No. WO 92/15679; PCT Publication No. WO 93/01288; PCT Publication No. WO 92/01047; PCT Publication No. WO 92/09690; PCT

Publication No. WO 90/02809; Fuchs *et al.* (1991) *Bio/Technology*, 9:1370-1372; Hay *et al.* (1992) *Hum. Antibod. Hybridomas*, 3:81-85; Huse *et al.* (1989) *Science*, 246:1275-1281; Griffiths *et al.* (1993) *EMBO J.*, 12:725-734.

Additionally, recombinant antibodies, such as chimeric and humanized
5 monoclonal antibodies, comprising both human and non-human portions, which can be made using standard recombinant DNA techniques, are within the scope of the invention. Such chimeric and humanized monoclonal antibodies can be produced by recombinant DNA techniques known in the art.

In general, antibodies of the invention (*e.g.*, a monoclonal antibody) can be
10 used to isolate a polypeptide of the invention by standard techniques, such as affinity chromatography or immunoprecipitation. A polypeptide-specific antibody can facilitate the purification of natural polypeptide from cells and of recombinantly produced polypeptide expressed in host cells. Moreover, an antibody specific for a polypeptide of the invention can be used to detect the polypeptide (*e.g.*, in a cellular
15 lysate, cell supernatant, or tissue sample) in order to evaluate the abundance and pattern of expression of the polypeptide. Antibodies can be used diagnostically to monitor protein levels in tissue as part of a clinical testing procedure, *e.g.*, to, for example, determine the efficacy of a given treatment regimen. Detection can be facilitated by coupling the antibody to a detectable substance. Examples of
20 detectable substances include various enzymes, prosthetic groups, fluorescent materials, luminescent materials, bioluminescent materials, and radioactive materials. Examples of suitable enzymes include horseradish peroxidase, alkaline phosphatase, β -galactosidase, or acetylcholinesterase; examples of suitable prosthetic group complexes include streptavidin/biotin and avidin/biotin; examples
25 of suitable fluorescent materials include umbelliferone, fluorescein, fluorescein isothiocyanate, rhodamine, dichlorotriazinylamine fluorescein, dansyl chloride or phycoerythrin; an example of a luminescent material includes luminol; examples of bioluminescent materials include luciferase, luciferin, and aequorin, and examples of suitable radioactive material include ^{125}I , ^{131}I , ^{35}S or ^3H .

DIAGNOSTIC AND SCREENING ASSAYS OF THE INVENTION

The present invention also pertains to a method of diagnosing or aiding in the diagnosis of stroke associated with the presence of the PDE4D gene or gene product in an individual. Diagnostic assays can be designed for assessing PDE4D gene
5 expression, or for assessing activity of PDE4D polypeptides of the invention. In one embodiment, the assays are used in the context of a biological sample (*e.g.*, blood, serum, cells, tissue) to thereby determine whether an individual is afflicted with stroke, or is at risk for (has a predisposition for or a susceptibility to) developing stroke. The invention also provides for prognostic (or predictive) assays for
10 determining whether an individual is susceptible to developing stroke. For example, mutations in the gene can be assayed in a biological sample. Such assays can be used for prognostic or predictive purpose to thereby prophylactically treat an individual prior to the onset of symptoms associated with stroke. Another aspect of the invention pertains to assays for monitoring the influence of agents (*e.g.*, drugs,
15 compounds or other agents) on the gene expression or activity of polypeptides of the invention, as well as to assays for identifying agents which bind to PDE4D polypeptides. These and other assays and agents are described in further detail in the following sections.

DIAGNOSTIC ASSAYS

20 The nucleic acids, probes, primers, polypeptides and antibodies described herein can be used in methods of diagnosis of a susceptibility to stroke, as well as in kits useful for diagnosis of a susceptibility to stroke.

In one embodiment of the invention, diagnosis of a susceptibility to stroke is made by detecting a polymorphism in PDE4D as described herein. The
25 polymorphism can be a mutation in PDE4D, such as the insertion or deletion of a single nucleotide, or of more than one nucleotide, resulting in a frame shift mutation; the change of at least one nucleotide, resulting in a change in the encoded amino acid; the change of at least one nucleotide, resulting in the generation of a premature stop codon; the deletion of several nucleotides, resulting in a deletion of one or more
30 amino acids encoded by the nucleotides; the insertion of one or several nucleotides,

such as by unequal recombination or gene conversion, resulting in an interruption of the coding sequence of the gene; duplication of all or a part of the gene; transposition of all or a part of the gene; or rearrangement of all or a part of the gene.

More than one such mutation may be present in a single gene. Such sequence

5 changes cause a mutation in the polypeptide encoded by a *PDE4D* gene. For example, if the mutation is a frame shift mutation, the frame shift can result in a change in the encoded amino acids, and/or can result in the generation of a premature stop codon, causing generation of a truncated polypeptide. Alternatively, a polymorphism associated with a susceptibility to stroke can be a synonymous
10 mutation in one or more nucleotides (i.e., a mutation that does not result in a change in the polypeptide encoded by a *PDE4D* gene). Such a polymorphism may alter splicing sites, affect the stability or transport of mRNA, or otherwise affect the transcription or translation of the gene. A *PDE4D* gene that has any of the mutations described above is referred to herein as a "mutant gene."

15 In a first method of diagnosing a susceptibility to stroke, hybridization methods, such as Southern analysis, Northern analysis, or *in situ* hybridizations, can be used (see Current Protocols in Molecular Biology, Ausubel, F. *et al.*, eds., John Wiley & Sons, including all supplements through 1999). For example, a biological sample from a test subject (a "test sample") of genomic DNA, RNA, or cDNA, is
20 obtained from an individual suspected of having, being susceptible to or predisposed for, or carrying a defect for, stroke (the "test individual"). The individual can be an adult, child, or fetus. The test sample can be from any source which contains genomic DNA, such as a blood sample, sample of amniotic fluid, sample of cerebrospinal fluid, or tissue sample from skin, muscle, buccal or conjunctival
25 mucosa, placenta, gastrointestinal tract or other organs. A test sample of DNA from fetal cells or tissue can be obtained by appropriate methods, such as by amniocentesis or chorionic villus sampling. The DNA, RNA, or cDNA sample is then examined to determine whether a polymorphism in *PDE4D* is present, and/or to determine which splicing variant(s) encoded by *PDE4D* is present. The presence of
30 the polymorphism or splicing variant(s) can be indicated by hybridization of the gene in the genomic DNA, RNA, or cDNA to a nucleic acid probe. A "nucleic acid

probe”, as used herein, can be a DNA probe or an RNA probe; the nucleic acid probe can contain at least one polymorphism in PDE4D or contains a nucleic acid encoding a particular splicing variant of PDE4D. The probe can be any of the nucleic acid molecules described above (e.g., the gene, a fragment, a vector
5 comprising the gene, a probe or primer, etc.).

To diagnose a susceptibility to stroke, a hybridization sample is formed by contacting the test sample containing PDE4D, with at least one nucleic acid probe. A preferred probe for detecting mRNA or genomic DNA is a labeled nucleic acid probe capable of hybridizing to mRNA or genomic DNA sequences described
10 herein. The nucleic acid probe can be, for example, a full-length nucleic acid molecule, or a portion thereof, such as an oligonucleotide of at least 15, 30, 50, 100, 250 or 500 nucleotides in length and sufficient to specifically hybridize under stringent conditions to appropriate mRNA or genomic DNA. For example, the nucleic acid probe can be all or a portion of SEQ ID NO: 1 which may optionally
15 comprise at least one polymorphism shown in Tables 9 and 10, or the complement thereof, or a portion thereof; or can be a nucleic acid encoding a portion of SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14. Other suitable probes for use in the diagnostic assays of the invention are described above (see e.g., probes and primers discussed under the heading, “Nucleic Acids of the Invention”).

20 The hybridization sample is maintained under conditions which are sufficient to allow specific hybridization of the nucleic acid probe to PDE4D. “Specific hybridization”, as used herein, indicates exact hybridization (e.g., with no mismatches). Specific hybridization can be performed under high stringency conditions or moderate stringency conditions, for example, as described above. In a
25 particularly preferred embodiment, the hybridization conditions for specific hybridization are high stringency.

Specific hybridization, if present, is then detected using standard methods. If specific hybridization occurs between the nucleic acid probe and PDE4D in the test sample, then PDE4D has the polymorphism, or is the splicing variant, that is present
30 in the nucleic acid probe. More than one nucleic acid probe can also be used concurrently in this method. Specific hybridization of any one of the nucleic acid

probes is indicative of a polymorphism in PDE4D, or of the presence of a particular splicing variant encoding PDE4D and is therefore diagnostic for a susceptibility to stroke.

In Northern analysis (see Current Protocols in Molecular Biology, Ausubel, F. *et al.*, eds., John Wiley & Sons, *supra*) the hybridization methods described above are used to identify the presence of a polymorphism or a particular splicing variant, associated with a susceptibility to stroke. For Northern analysis, a test sample of RNA is obtained from the individual by appropriate means. Specific hybridization of a nucleic acid probe, as described above, to RNA from the individual is indicative of a polymorphism in PDE4D, or of the presence of a particular splicing variant encoded by PDE4D, and is therefore diagnostic for a susceptibility to stroke.

For representative examples of use of nucleic acid probes, see, for example, U.S. Patents No. 5,288,611 and 4,851,330.

Alternatively, a peptide nucleic acid (PNA) probe can be used instead of a nucleic acid probe in the hybridization methods described above. PNA is a DNA mimic having a peptide-like, inorganic backbone, such as N-(2-aminoethyl)glycine units, with an organic base (A, G, C, T or U) attached to the glycine nitrogen via a methylene carbonyl linker (see, for example, Nielsen, P.E. *et al.*, *Bioconjugate Chemistry*, 1994, 5, American Chemical Society, p. 1 (1994)). The PNA probe can be designed to specifically hybridize to a gene having a polymorphism associated with a susceptibility to stroke. Hybridization of the PNA probe to PDE4D is diagnostic for a susceptibility to stroke.

In another method of the invention, mutation analysis by restriction digestion can be used to detect a mutant gene, or genes containing a polymorphism(s), if the mutation or polymorphism in the gene results in the creation or elimination of a restriction site. A test sample containing genomic DNA is obtained from the individual. Polymerase chain reaction (PCR) can be used to amplify PDE4D (and, if necessary, the flanking sequences) in the test sample of genomic DNA from the test individual. RFLP analysis is conducted as described (see Current Protocols in Molecular Biology, *supra*). The digestion pattern of the relevant DNA fragment

indicates the presence or absence of the mutation or polymorphism in PDE4D, and therefore indicates the presence or absence of this susceptibility to stroke.

Sequence analysis can also be used to detect specific polymorphisms in PDE4D. A test sample of DNA or RNA is obtained from the test individual. PCR
5 or other appropriate methods can be used to amplify the gene, and/or its flanking sequences, if desired. The sequence of PDE4D, or a fragment of the gene, or cDNA, or fragment of the cDNA, or mRNA, or fragment of the mRNA, is determined, using standard methods. The sequence of the gene, gene fragment, cDNA, cDNA
10 fragment, mRNA, or mRNA fragment is compared with the known nucleic acid sequence of the gene, cDNA (e.g., SEQ ID NO:1 which may optionally comprise at least one polymorphism shown in Tables 9 and 10, or a nucleic acid sequence encoding SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14, or a fragment thereof) or mRNA, as appropriate. The presence of a polymorphism in PDE4D indicates that the individual has a susceptibility to stroke.

15 Allele-specific oligonucleotides can also be used to detect the presence of a polymorphism in PDE4D, through the use of dot-blot hybridization of amplified oligonucleotides with allele-specific oligonucleotide (ASO) probes (see, for example, Saiki, R. *et al.*, (1986), *Nature (London)* 324:163-166). An "allele-specific oligonucleotide" (also referred to herein as an "allele-specific oligonucleotide
20 probe") is an oligonucleotide of approximately 10-50 base pairs, preferably approximately 15-30 base pairs, that specifically hybridizes to PDE4D, and that contains a polymorphism associated with a susceptibility to stroke. An allele-specific oligonucleotide probe that is specific for particular polymorphisms in PDE4D can be prepared, using standard methods (see Current Protocols in
25 Molecular Biology, *supra*). To identify polymorphisms in the gene that are associated with a susceptibility to stroke, a test sample of DNA is obtained from the individual. PCR can be used to amplify all or a fragment of PDE4D, and its flanking sequences. The DNA containing the amplified PDE4D (or fragment of the gene) is dot-blotted, using standard methods (see Current Protocols in Molecular
30 Biology, *supra*), and the blot is contacted with the oligonucleotide probe. The presence of specific hybridization of the probe to the amplified PDE4D is then

detected. Specific hybridization of an allele-specific oligonucleotide probe to DNA from the individual is indicative of a polymorphism in PDE4D, and is therefore indicative of a susceptibility to stroke.

In another embodiment, arrays of oligonucleotide probes that are
5 complementary to target nucleic acid sequence segments from an individual, can be used to identify polymorphisms in PDE4D. For example, in one embodiment, an oligonucleotide array can be used. Oligonucleotide arrays typically comprise a plurality of different oligonucleotide probes that are coupled to a surface of a substrate in different known locations. These oligonucleotide arrays, also described
10 as "Genechips.TM.," have been generally described in the art, for example, U.S. Pat. No. 5,143,854 and PCT patent publication Nos. WO 90/15070 and 92/10092. These arrays can generally be produced using mechanical synthesis methods or light directed synthesis methods which incorporate a combination of photolithographic methods and solid phase oligonucleotide synthesis methods. See Fodor *et al.*,
15 *Science*, 251:767-777 (1991), Pirrung *et al.*, U.S. Pat. No. 5,143,854 (see also PCT Application No. WO 90/15070) and Fodor *et al.*, PCT Publication No. WO 92/10092 and U.S. Pat. No. 5,424,186, the entire teachings of each of which are incorporated by reference herein. Techniques for the synthesis of these arrays using mechanical synthesis methods are described in, e.g., U.S. Pat. Nos. 5,384,261, the
20 entire teachings of which are incorporated by reference herein.

Once an oligonucleotide array is prepared, a nucleic acid of interest is hybridized with the array and scanned for polymorphisms. Hybridization and scanning are generally carried out by methods described herein and also in, e.g., Published PCT Application Nos. WO 92/10092 and WO 95/11995, and U.S. Pat.
25 No. 5,424,186, the entire teachings of which are incorporated by reference herein. In brief, a target nucleic acid sequence which includes one or more previously identified polymorphic markers is amplified by well known amplification techniques, e.g., PCR. Typically, this involves the use of primer sequences that are complementary to the two strands of the target sequence both upstream and
30 downstream from the polymorphism. Asymmetric PCR techniques may also be used. Amplified target, generally incorporating a label, is then hybridized with the

array under appropriate conditions. Upon completion of hybridization and washing of the array, the array is scanned to determine the position on the array to which the target sequence hybridizes. The hybridization data obtained from the scan is typically in the form of fluorescence intensities as a function of location on the array.

5 Although primarily described in terms of a single detection block, e.g., for detection of a single polymorphism, arrays can include multiple detection blocks, and thus be capable of analyzing multiple, specific polymorphisms. In alternate arrangements, it will generally be understood that detection blocks may be grouped within a single array or in multiple, separate arrays so that varying, optimal
10 conditions may be used during the hybridization of the target to the array. For example, it may often be desirable to provide for the detection of those polymorphisms that fall within G-C rich stretches of a genomic sequence, separately from those falling in A-T rich segments. This allows for the separate optimization of hybridization conditions for each situation.

15 Additional description of use of oligonucleotide arrays for detection of polymorphisms can be found, for example, in U.S. Patents 5,858,659 and 5,837,832, the entire teachings of which are incorporated by reference herein.

 Other methods of nucleic acid analysis can be used to detect polymorphisms in PDE4D or splicing variants encoding by PDE4D. Representative methods
20 include direct manual sequencing (Church and Gilbert, (1988), *Proc. Natl. Acad. Sci. USA* 81:1991-1995; Sanger, F. *et al.* (1977) *Proc. Natl. Acad. Sci.* 74:5463-5467; Beavis *et al.* U.S. Pat. No. 5,288,644); automated fluorescent sequencing; single-stranded conformation polymorphism assays (SSCP); clamped denaturing gel electrophoresis (CDGE); denaturing gradient gel electrophoresis (DGGE) (Sheffield,
25 V.C. *et al.* (1989) *Proc. Natl. Acad. Sci. USA* 86:232-236), mobility shift analysis (Orita, M. *et al.* (1989) *Proc. Natl. Acad. Sci. USA* 86:2766-2770), restriction enzyme analysis (Flavell *et al.* (1978) *Cell* 15:25; Geever, *et al.* (1981) *Proc. Natl. Acad. Sci. USA* 78:5081); heteroduplex analysis; chemical mismatch cleavage (CMC) (Cotton *et al.* (1985) *Proc. Natl. Acad. Sci. USA* 85:4397-4401); RNase
30 protection assays (Myers, R.M. *et al.* (1985) *Science* 230:1242); use of polypeptides

which recognize nucleotide mismatches, such as *E. coli* mutS protein; allele-specific PCR, for example.

In another embodiment of the invention, diagnosis of a susceptibility to stroke can also be made by examining expression and/or composition of an PDE4D polypeptide, by a variety of methods, including enzyme linked immunosorbent assays (ELISAs), Western blots, immunoprecipitations and immunofluorescence. A test sample from an individual is assessed for the presence of an alteration in the expression and/or an alteration in composition of the polypeptide encoded by PDE4D, or for the presence of a particular variant encoded by PDE4D. An alteration in expression of a polypeptide encoded by PDE4D can be, for example, an alteration in the quantitative polypeptide expression (i.e., the amount of polypeptide produced); an alteration in the composition of a polypeptide encoded by PDE4D is an alteration in the qualitative polypeptide expression (e.g., expression of a mutant PDE4D polypeptide or of a different splicing variant). In a preferred embodiment, diagnosis of a susceptibility to stroke is made by detecting a particular splicing variant encoded by PDE4D, or a particular pattern of splicing variants.

Both such alterations (quantitative and qualitative) can also be present. An "alteration" in the polypeptide expression or composition, as used herein, refers to an alteration in expression or composition in a test sample, as compared with the expression or composition of polypeptide by PDE4D in a control sample. A control sample is a sample that corresponds to the test sample (e.g., is from the same type of cells), and is from an individual who is not affected by stroke. An alteration in the expression or composition of the polypeptide in the test sample, as compared with the control sample, is indicative of a susceptibility to stroke. Similarly, the presence of one or more different splicing variants in the test sample, or the presence of significantly different amounts of different splicing variants in the test sample, as compared with the control sample, is indicative of a susceptibility to stroke. Various means of examining expression or composition of the polypeptide encoded by PDE4D can be used, including spectroscopy, colorimetry, electrophoresis, isoelectric focusing, and immunoassays (e.g., David *et al.*, U.S. Pat. No. 4,376,110) such as immunoblotting (see also Current Protocols in Molecular Biology,

particularly chapter 10). For example, in one embodiment, an antibody capable of binding to the polypeptide (e.g., as described above), preferably an antibody with a detectable label, can be used. Antibodies can be polyclonal, or more preferably, monoclonal. An intact antibody, or a fragment thereof (e.g., Fab or F(ab')₂) can be
5 used. The term "labeled", with regard to the probe or antibody, is intended to encompass direct labeling of the probe or antibody by coupling (*i.e.*, physically linking) a detectable substance to the probe or antibody, as well as indirect labeling of the probe or antibody by reactivity with another reagent that is directly labeled. Examples of indirect labeling include detection of a primary antibody using a
10 fluorescently labeled secondary antibody and end-labeling of a DNA probe with biotin such that it can be detected with fluorescently labeled streptavidin.

Western blotting analysis, using an antibody as described above that specifically binds to a polypeptide encoded by a mutant PDE4D, or an antibody that specifically binds to a polypeptide encoded by a non-mutant gene, or an antibody
15 that specifically binds to a particular splicing variant encoded by PDE4D, can be used to identify the presence in a test sample of a particular splicing variant or of a polypeptide encoded by a polymorphic or mutant PDE4D, or the absence in a test sample of a particular splicing variant or of a polypeptide encoded by a non-polymorphic or non-mutant gene. The presence of a polypeptide encoded by a
20 polymorphic or mutant gene, or the absence of a polypeptide encoded by a non-polymorphic or non-mutant gene, is diagnostic for a susceptibility to stroke, as is the presence (or absence) of particular splicing variants encoded by the PDE4D gene.

In one embodiment of this method, the level or amount of polypeptide encoded by PDE4D in a test sample is compared with the level or amount of the
25 polypeptide encoded by PDE4D in a control sample. A level or amount of the polypeptide in the test sample that is higher or lower than the level or amount of the polypeptide in the control sample, such that the difference is statistically significant, is indicative of an alteration in the expression of the polypeptide encoded by PDE4D, and is diagnostic for a susceptibility to stroke. Alternatively, the
30 composition of the polypeptide encoded by PDE4D in a test sample is compared with the composition of the polypeptide encoded by PDE4D in a control sample

- (e.g., the presence of different splicing variants). A difference in the composition of the polypeptide in the test sample, as compared with the composition of the polypeptide in the control sample, is diagnostic for a susceptibility to stroke. In another embodiment, both the level or amount and the composition of the polypeptide can be assessed in the test sample and in the control sample. A difference in the amount or level of the polypeptide in the test sample, compared to the control sample; a difference in composition in the test sample, compared to the control sample; or both a difference in the amount or level, and a difference in the composition, is indicative of a susceptibility to stroke.
- 10 Kits (e.g., reagent kits) useful in the methods of diagnosis comprise components useful in any of the methods described herein, including for example, hybridization probes or primers as described herein (e.g., labeled probes or primers), reagents for detection of labeled molecules, restriction enzymes (e.g., for RFLP analysis), allele-specific oligonucleotides, antibodies which bind to mutant or to non-mutant (native) PDE4D polypeptide, means for amplification of nucleic acids comprising PDE4D, or means for analyzing the nucleic acid sequence of PDE4D or for analyzing the amino acid sequence of an PDE4D polypeptide, etc.
- 15

SCREENING ASSAYS AND AGENTS IDENTIFIED THEREBY

- The invention provides methods (also referred to herein as "screening assays") for identifying the presence of a nucleotide that hybridizes to a nucleic acid of the invention, as well as for identifying the presence of a polypeptide encoded by a nucleic acid of the invention. In one embodiment, the presence (or absence) of a nucleic acid molecule of interest (e.g., a nucleic acid that has significant homology with a nucleic acid of the invention) in a sample can be assessed by contacting the sample with a nucleic acid comprising a nucleic acid of the invention (e.g., a nucleic acid having the sequence of SEQ ID NO: 1 which may optionally comprise at least one polymorphism shown in Tables 9 and 10, or the complement thereof, or a nucleic acid encoding an amino acid having the sequence of SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14, or a fragment or variant of such nucleic acids), under stringent conditions as described above, and then assessing the sample for the
- 20
- 25
- 30

presence (or absence) of hybridization. In a preferred embodiment, high stringency conditions are conditions appropriate for selective hybridization. In another embodiment, a sample containing the nucleic acid molecule of interest is contacted with a nucleic acid containing a contiguous nucleotide sequence (e.g., a primer or a probe as described above) that is at least partially complementary to a part of the nucleic acid molecule of interest (e.g., a PDE4D nucleic acid), and the contacted sample is assessed for the presence or absence of hybridization. In a preferred embodiment, the nucleic acid containing a contiguous nucleotide sequence is completely complementary to a part of the nucleic acid molecule of interest.

10 In any of these embodiment, all or a portion of the nucleic acid of interest can be subjected to amplification prior to performing the hybridization.

In another embodiment, the presence (or absence) of a polypeptide of interest, such as a polypeptide of the invention or a fragment or variant thereof, in a sample can be assessed by contacting the sample with an antibody that specifically hybridizes to the polypeptide of interest (e.g., an antibody such as those described above), and then assessing the sample for the presence (or absence) of binding of the antibody to the polypeptide of interest.

In another embodiment, the invention provides methods for identifying agents (e.g., fusion proteins, polypeptides, peptidomimetics, prodrugs, receptors, binding agents, antibodies, small molecules or other drugs, or ribozymes which alter (e.g., increase or decrease) the activity of the polypeptides described herein, or which otherwise interact with the polypeptides herein. For example, such agents can be agents which bind to polypeptides described herein (e.g., PDE4D binding agents); which have a stimulatory or inhibitory effect on, for example, activity of polypeptides of the invention; or which change (e.g., enhance or inhibit) the ability of the polypeptides of the invention to interact with PDE4D binding agents (e.g., receptors or other binding agents); or which alter posttranslational processing of the PDE4D polypeptide (e.g., agents that alter proteolytic processing to direct the polypeptide from where it is normally synthesized to another location in the cell, such as the cell surface; agents that alter proteolytic processing such that more polypeptide is released from the cell, etc.

In one embodiment, the invention provides assays for screening candidate or test agents that bind to or modulate the activity of polypeptides described herein (or biologically active portion(s) thereof), as well as agents identifiable by the assays. Test agents can be obtained using any of the numerous approaches in combinatorial library methods known in the art, including: biological libraries; spatially addressable parallel solid phase or solution phase libraries; synthetic library methods requiring deconvolution; the 'one-bead one-compound' library method; and synthetic library methods using affinity chromatography selection. The biological library approach is limited to polypeptide libraries, while the other four approaches are applicable to polypeptide, non-peptide oligomer or small molecule libraries of compounds (Lam, K.S. (1997) *Anticancer Drug Des.*, 12:145).

In one embodiment, to identify agents which alter the activity of a PDE4D polypeptide, a cell, cell lysate, or solution containing or expressing a PDE4D polypeptide (e.g., SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14, or another splicing variant encoded by PDE4D), or a fragment or derivative thereof (as described above), can be contacted with an agent to be tested; alternatively, the polypeptide can be contacted directly with the agent to be tested. The level (amount) of PDE4D activity is assessed (e.g., the level (amount) of PDE4D activity is measured, either directly or indirectly), and is compared with the level of activity in a control (i.e., the level of activity of the PDE4D polypeptide or active fragment or derivative thereof in the absence of the agent to be tested). If the level of the activity in the presence of the agent differs, by an amount that is statistically significant, from the level of the activity in the absence of the agent, then the agent is an agent that alters the activity of PDE4D polypeptide. An increase in the level of PDE4D activity relative to a control, indicates that the agent is an agent that enhances (is an agonist of) PDE4D activity. Similarly, a decrease in the level of PDE4D activity relative to a control, indicates that the agent is an agent that inhibits (is an antagonist of) PDE4D activity. In another embodiment, the level of activity of a PDE4D polypeptide or derivative or fragment thereof in the presence of the agent to be tested, is compared with a control level that has previously been established. A level of the activity in the

presence of the agent that differs from the control level by an amount that is statistically significant indicates that the agent alters PDE4D activity.

The present invention also relates to an assay for identifying agents which alter the expression of the PDE4D gene (e.g., antisense nucleic acids, fusion
5 proteins, polypeptides, peptidomimetics, prodrugs, receptors, binding agents, antibodies, small molecules or other drugs, or ribozymes) which alter (e.g., increase or decrease) expression (e.g., transcription or translation) of the gene or which otherwise interact with the nucleic acids described herein, as well as agents identifiable by the assays. For example, a solution containing a nucleic acid
10 encoding PDE4D polypeptide (e.g., PDE4D gene) can be contacted with an agent to be tested. The solution can comprise, for example, cells containing the nucleic acid or cell lysate containing the nucleic acid; alternatively, the solution can be another solution which comprises elements necessary for transcription/translation of the nucleic acid. Cells not suspended in solution can also be employed, if desired. The
15 level and/or pattern of PDE4D expression (e.g., the level and/or pattern of mRNA or of protein expressed, such as the level and/or pattern of different splicing variants) is assessed, and is compared with the level and/or pattern of expression in a control (i.e., the level and/or pattern of the PDE4D expression in the absence of the agent to be tested). If the level and/or pattern in the presence of the agent differs, by an
20 amount or in a manner that is statistically significant, from the level and/or pattern in the absence of the agent, then the agent is an agent that alters the expression of PDE4D. Enhancement of PDE4D expression indicates that the agent is an agonist of PDE4D activity. Similarly, inhibition of PDE4D expression indicates that the agent is an antagonist of PDE4D activity. In another embodiment, the level and/or
25 pattern of PDE4D polypeptide(s) (e.g., different splicing variants) in the presence of the agent to be tested, is compared with a control level and/or pattern that has previously been established. A level and/or pattern in the presence of the agent that differs from the control level and/or pattern by an amount or in a manner that is statistically significant indicates that the agent alters PDE4D expression.

30 In another embodiment of the invention, agents which alter the expression of the PDE4D gene or which otherwise interact with the nucleic acids described herein,

can be identified using a cell, cell lysate, or solution containing a nucleic acid encoding the promoter region of the PDE4D gene operably linked to a reporter gene. After contact with an agent to be tested, the level of expression of the reporter gene (e.g., the level of mRNA or of protein expressed) is assessed, and is compared with

5 the level of expression in a control (i.e., the level of the expression of the reporter gene in the absence of the agent to be tested). If the level in the presence of the agent differs, by an amount or in a manner that is statistically significant, from the level in the absence of the agent, then the agent is an agent that alters the expression of PDE4D, as indicated by its ability to alter expression of a gene that is operably

10 linked to the PDE4D gene promoter. Enhancement of the expression of the reporter indicates that the agent is an agonist of PDE4D activity. Similarly, inhibition of the expression of the reporter indicates that the agent is an antagonist of PDE4D activity. In another embodiment, the level of expression of the reporter in the presence of the agent to be tested, is compared with a control level that has

15 previously been established. A level in the presence of the agent that differs from the control level by an amount or in a manner that is statistically significant indicates that the agent alters PDE4D expression.

Agents which alter the amounts of different splicing variants encoded by PDE4D (e.g., an agent which enhances activity of a first splicing variant, and which

20 inhibits activity of a second splicing variant), as well as agents which are agonists of activity of a first splicing variant and antagonists of activity of a second splicing variant, can easily be identified using these methods described above.

In other embodiments of the invention, assays can be used to assess the impact of a test agent on the activity of a polypeptide in relation to a PDE4D binding

25 agent. For example, a cell that expresses a compound that interacts with PDE4D (herein referred to as a "PDE4D binding agent", which can be a polypeptide or other molecule that interacts with PDE4D, such as a receptor) is contacted with PDE4D in the presence of a test agent, and the ability of the test agent to alter the interaction between PDE4D and the PDE4D binding agent is determined. Alternatively, a cell

30 lysate or a solution containing the PDE4D binding agent, can be used. An agent

which binds to PDE4D or the PDE4D binding agent can alter the interaction by interfering with, or enhancing the ability of PDE4D to bind to, associate with, or otherwise interact with the PDE4D binding agent. Determining the ability of the test agent to bind to PDE4D or an PDE4D binding agent can be accomplished, for example, by coupling the test agent with a radioisotope or enzymatic label such that binding of the test agent to the polypeptide can be determined by detecting the labeled with ^{125}I , ^{35}S , ^{14}C or ^3H , either directly or indirectly, and the radioisotope detected by direct counting of radioemmission or by scintillation counting. Alternatively, test agents can be enzymatically labeled with, for example, horseradish peroxidase, alkaline phosphatase, or luciferase, and the enzymatic label detected by determination of conversion of an appropriate substrate to product. It is also within the scope of this invention to determine the ability of a test agent to interact with the polypeptide without the labeling of any of the interactants. For example, a microphysiometer can be used to detect the interaction of a test agent with PDE4D or a PDE4D binding agent without the labeling of either the test agent, PDE4D, or the PDE4D binding agent. McConnell, H.M. *et al.* (1992) *Science*, 257:1906-1912. As used herein, a "microphysiometer" (*e.g.*, Cytosensor™) is an analytical instrument that measures the rate at which a cell acidifies its environment using a light-addressable potentiometric sensor (LAPS). Changes in this acidification rate can be used as an indicator of the interaction between ligand and polypeptide. See the Examples Section for a discussion of known PDE4D binding partners. Thus, these receptors can be used to screen for compounds that are PDE4D receptor agonists for use in treating stroke or PDE4D receptor antagonists for studying stroke. The linkage data provided herein, for the first time, provides such connection to stroke. Drugs could be designed to regulate PDE4D receptor activation which in turn can be used to regulate signaling pathways and transcription events of genes downstream, such as Cbfa1.

In another embodiment of the invention, assays can be used to identify polypeptides that interact with one or more PDE4D polypeptides, as described herein. For example, a yeast two-hybrid system such as that described by Fields and Song (Fields, S. and Song, O., *Nature* 340:245-246 (1989)) can be used to identify

polypeptides that interact with one or more PDE4D polypeptides. In such a yeast two-hybrid system, vectors are constructed based on the flexibility of a transcription factor which has two functional domains (a DNA binding domain and a transcription activation domain). If the two domains are separated but fused to two different

5 proteins that interact with one another, transcriptional activation can be achieved, and transcription of specific markers (e.g., nutritional markers such as His and Ade, or color markers such as lacZ) can be used to identify the presence of interaction and transcriptional activation. For example, in the methods of the invention, a first vector is used which includes a nucleic acid encoding a DNA binding domain and

10 also an PDE4D polypeptide, splicing variant, or fragment or derivative thereof, and a second vector is used which includes a nucleic acid encoding a transcription activation domain and also a nucleic acid encoding a polypeptide which potentially may interact with the PDE4D polypeptide, splicing variant, or fragment or derivative thereof (e.g., a PDE4D polypeptide binding agent or receptor). Incubation of yeast

15 containing the first vector and the second vector under appropriate conditions (e.g., mating conditions such as used in the Matchmaker™ system from Clontech) allows identification of colonies which express the markers of interest. These colonies can be examined to identify the polypeptide(s) which interact with the PDE4D polypeptide or fragment or derivative thereof. Such polypeptides may be useful as

20 agents which alter the activity of expression of an PDE4D polypeptide, as described above.

In more than one embodiment of the above assay methods of the present invention, it may be desirable to immobilize either PDE4D, the PDE4D binding agent, or other components of the assay on a solid support, in order to facilitate

25 separation of complexed from uncomplexed forms of one or both of the polypeptides, as well as to accommodate automation of the assay. Binding of a test agent to the polypeptide, or interaction of the polypeptide with a binding agent in the presence and absence of a test agent, can be accomplished in any vessel suitable for containing the reactants. Examples of such vessels include microtitre plates, test

30 tubes, and micro-centrifuge tubes. In one embodiment, a fusion protein (e.g., a glutathione-S-transferase fusion protein) can be provided which adds a domain that

allows PDE4D or a PDE4D binding agent to be bound to a matrix or other solid support.

In another embodiment, modulators of expression of nucleic acid molecules of the invention are identified in a method wherein a cell, cell lysate, or solution
5 containing a nucleic acid encoding PDE4D is contacted with a test agent and the expression of appropriate mRNA or polypeptide (e.g., splicing variant(s)) in the cell, cell lysate, or solution, is determined. The level of expression of appropriate mRNA or polypeptide(s) in the presence of the test agent is compared to the level of expression of mRNA or polypeptide(s) in the absence of the test agent. The test
10 agent can then be identified as a modulator of expression based on this comparison. For example, when expression of mRNA or polypeptide is greater (statistically significantly greater) in the presence of the test agent than in its absence, the test agent is identified as a stimulator or enhancer of the mRNA or polypeptide expression. Alternatively, when expression of the mRNA or polypeptide is less
15 (statistically significantly less) in the presence of the test agent than in its absence, the test agent is identified as an inhibitor of the mRNA or polypeptide expression. The level of mRNA or polypeptide expression in the cells can be determined by methods described herein for detecting mRNA or polypeptide.

This invention further pertains to novel agents identified by the
20 above-described screening assays. Accordingly, it is within the scope of this invention to further use an agent identified as described herein in an appropriate animal model. For example, an agent identified as described herein (e.g., a test agent that is a modulating agent, an antisense nucleic acid molecule, a specific antibody, or a polypeptide-binding agent) can be used in an animal model to
25 determine the efficacy, toxicity, or side effects of treatment with such an agent. Alternatively, an agent identified as described herein can be used in an animal model to determine the mechanism of action of such an agent. Furthermore, this invention pertains to uses of novel agents identified by the above-described screening assays for treatments as described herein. In addition, an agent identified as described
30 herein can be used to alter activity of a polypeptide encoded by PDE4D, or to alter expression of PDE4D, by contacting the polypeptide or the gene (or contacting a cell

comprising the polypeptide or the gene) with the agent identified as described herein.

PHARMACEUTICAL COMPOSITIONS

The present invention also pertains to pharmaceutical compositions comprising nucleic acids described herein, particularly nucleotides encoding the polypeptides described herein; comprising polypeptides described herein (e.g., one or more of SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14); and/or comprising other splicing variants encoded by PDE4D; and/or an agent that alters (e.g., enhances or inhibits) PDE4D gene expression or PDE4D polypeptide activity as described herein. For instance, a polypeptide, protein (e.g., an PDE4D receptor), an agent that alters PDE4D gene expression, or a PDE4D binding agent or binding partner, fragment, fusion protein or prodrug thereof, or a nucleotide or nucleic acid construct (vector) comprising a nucleotide of the present invention, or an agent that alters PDE4D polypeptide activity, can be formulated with a physiologically acceptable carrier or excipient to prepare a pharmaceutical composition. The carrier and composition can be sterile. The formulation should suit the mode of administration.

Suitable pharmaceutically acceptable carriers include but are not limited to water, salt solutions (e.g., NaCl), saline, buffered saline, alcohols, glycerol, ethanol, gum arabic, vegetable oils, benzyl alcohols, polyethylene glycols, gelatin, carbohydrates such as lactose, amylose or starch, dextrose, magnesium stearate, talc, silicic acid, viscous paraffin, perfume oil, fatty acid esters, hydroxymethylcellulose, polyvinyl pyrrolidone, etc., as well as combinations thereof. The pharmaceutical preparations can, if desired, be mixed with auxiliary agents, e.g., lubricants, preservatives, stabilizers, wetting agents, emulsifiers, salts for influencing osmotic pressure, buffers, coloring, flavoring and/or aromatic substances and the like which do not deleteriously react with the active agents.

The composition, if desired, can also contain minor amounts of wetting or emulsifying agents, or pH buffering agents. The composition can be a liquid solution, suspension, emulsion, tablet, pill, capsule, sustained release formulation, or powder. The composition can be formulated as a suppository, with traditional

binders and carriers such as triglycerides. Oral formulation can include standard carriers such as pharmaceutical grades of mannitol, lactose, starch, magnesium stearate, polyvinyl pyrrolidone, sodium saccharine, cellulose, magnesium carbonate, etc.

5 Methods of introduction of these compositions include, but are not limited to, intradermal, intramuscular, intraperitoneal, intraocular, intravenous, subcutaneous, topical, oral and intranasal. Other suitable methods of introduction can also include gene therapy (as described below), rechargeable or biodegradable devices, particle acceleration devices ("gene guns") and slow release polymeric
10 devices. The pharmaceutical compositions of this invention can also be administered as part of a combinatorial therapy with other agents.

 The composition can be formulated in accordance with the routine procedures as a pharmaceutical composition adapted for administration to human beings. For example, compositions for intravenous administration typically are
15 solutions in sterile isotonic aqueous buffer. Where necessary, the composition may also include a solubilizing agent and a local anesthetic to ease pain at the site of the injection. Generally, the ingredients are supplied either separately or mixed together in unit dosage form, for example, as a dry lyophilized powder or water free concentrate in a hermetically sealed container such as an ampule or sachette indicat-
20 ing the quantity of active agent. Where the composition is to be administered by infusion, it can be dispensed with an infusion bottle containing sterile pharmaceutical grade water, saline or dextrose/water. Where the composition is administered by injection, an ampule of sterile water for injection or saline can be provided so that the ingredients may be mixed prior to administration.

25 For topical application, nonsprayable forms, viscous to semi-solid or solid forms comprising a carrier compatible with topical application and having a dynamic viscosity preferably greater than water, can be employed. Suitable formulations include but are not limited to solutions, suspensions, emulsions, creams, ointments, powders, enemas, lotions, sols, liniments, salves, aerosols, etc.,
30 which are, if desired, sterilized or mixed with auxiliary agents, e.g., preservatives, stabilizers, wetting agents, buffers or salts for influencing osmotic pressure, etc. The

agent may be incorporated into a cosmetic formulation. For topical application, also suitable are sprayable aerosol preparations wherein the active ingredient, preferably in combination with a solid or liquid inert carrier material, is packaged in a squeeze bottle or in admixture with a pressurized volatile, normally gaseous propellant, e.g.,
5 pressurized air.

Agents described herein can be formulated as neutral or salt forms.

Pharmaceutically acceptable salts include those formed with free amino groups such as those derived from hydrochloric, phosphoric, acetic, oxalic, tartaric acids, etc., and those formed with free carboxyl groups such as those derived from sodium,
10 potassium, ammonium, calcium, ferric hydroxides, isopropylamine, triethylamine, 2-ethylamino ethanol, histidine, procaine, etc.

The agents are administered in a therapeutically effective amount. The amount of agents which will be therapeutically effective in the treatment of a particular disorder or condition will depend on the nature of the disorder or
15 condition, and can be determined by standard clinical techniques. In addition, *in vitro* or *in vivo* assays may optionally be employed to help identify optimal dosage ranges. The precise dose to be employed in the formulation will also depend on the route of administration, and the seriousness of the symptoms of stroke, and should be decided according to the judgment of a practitioner and each patient's
20 circumstances. Effective doses may be extrapolated from dose-response curves derived from *in vitro* or animal model test systems.

The invention also provides a pharmaceutical pack or kit comprising one or more containers filled with one or more of the ingredients of the pharmaceutical compositions of the invention. Optionally associated with such container(s) can be a
25 notice in the form prescribed by a governmental agency regulating the manufacture, use or sale of pharmaceuticals or biological products, which notice reflects approval by the agency of manufacture, use of sale for human administration. The pack or kit can be labeled with information regarding mode of administration, sequence of drug administration (e.g., separately, sequentially or concurrently), or the like. The pack
30 or kit may also include means for reminding the patient to take the therapy. The pack or kit can be a single unit dosage of the combination therapy or it can be a

plurality of unit dosages. In particular, the agents can be separated, mixed together in any combination, present in a single vial or tablet. Agents assembled in a blister pack or other dispensing means is preferred. For the purpose of this invention, unit dosage is intended to mean a dosage that is dependent on the individual

5 pharmacodynamics of each agent and administered in FDA approved dosages in standard time courses.

METHODS OF THERAPY

The present invention also pertains to methods of treatment (prophylactic

10 and/or therapeutic) for stroke, particularly ischemic and TIA, using a PDE4D therapeutic agent. A "PDE4D therapeutic agent" is an agent that alters (e.g., enhances or inhibits) PDE4D polypeptide activity and/or PDE4D gene expression, as described herein (e.g., a PDE4D agonist or antagonist). PDE4D therapeutic agents can alter PDE4D polypeptide activity or gene expression by a variety of

15 means, such as, for example, by providing additional PDE4D polypeptide or by upregulating the transcription or translation of the PDE4D gene; by altering posttranslational processing of the PDE4D polypeptide; by altering transcription of PDE4D splicing variants; or by interfering with PDE4D polypeptide activity (e.g., by binding to a PDE4D polypeptide), or by downregulating the transcription or

20 translation of the PDE4D gene. Representative PDE4D therapeutic agents include the following:

nucleic acids or fragments or derivatives thereof described herein, particularly nucleotides encoding the polypeptides described herein and vectors comprising such nucleic acids (e.g., a gene, cDNA, and/or mRNA, such as a nucleic

25 acid encoding a PDE4D polypeptide or active fragment or derivative thereof, or an oligonucleotide; for example, SEQ ID NO: 1 which may optionally comprise at least one polymorphism shown in Tables 9 and 10 or a nucleic acid encoding SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14, or fragments or derivatives thereof);

polypeptides described herein (e.g., one or more of SEQ ID NO: 2, 3, 4, 5, 6,

30 7, 8, 9, 10, 12 or 14, and/or other splicing variants encoded by PDE4D, or fragments or derivatives thereof);

other polypeptides (e.g., PDE4D receptors); PDE4D binding agents; peptidomimetics; fusion proteins or prodrugs thereof; antibodies (e.g., an antibody to a mutant PDE4D polypeptide, or an antibody to a non-mutant PDE4D polypeptide, or an antibody to a particular splicing variant encoded by PDE4D, as described

5 above); ribozymes; other small molecules;

and other agents that alter (e.g., enhance or inhibit) PDE4D gene expression or polypeptide activity, or that regulate transcription of PDE4D splicing variants (e.g., agents that affect which splicing variants are expressed, or that affect the amount of each splicing variant that is expressed.

10 More than one PDE4D therapeutic agent can be used concurrently, if desired.

The PDE4D therapeutic agent that is a nucleic acid is used in the treatment of stroke. The term, "treatment" as used herein, refers not only to ameliorating symptoms associated with the disease, but also preventing or delaying the onset of the disease, and also lessening the severity or frequency of symptoms of the disease.

15 The therapy is designed to alter (e.g., inhibit or enhance), replace or supplement activity of a PDE4D polypeptide in an individual. For example, a PDE4D therapeutic agent can be administered in order to upregulate or increase the expression or availability of the PDE4D gene or of specific splicing variants of PDE4D, or, conversely, to downregulate or decrease the expression or availability of
20 the PDE4D gene or specific splicing variants of PDE4D. Upregulation or increasing expression or availability of a native PDE4D gene or of a particular splicing variant could interfere with or compensate for the expression or activity of a defective gene or another splicing variant; downregulation or decreasing expression or availability of a native PDE4D gene or of a particular splicing variant could minimize the
25 expression or activity of a defective gene or the particular splicing variant and thereby minimize the impact of the defective gene or the particular splicing variant.

The PDE4D therapeutic agent(s) are administered in a therapeutically effective amount (i.e., an amount that is sufficient to treat the disease, such as by ameliorating symptoms associated with the disease, preventing or delaying the onset
30 of the disease, and/or also lessening the severity or frequency of symptoms of the disease). The amount which will be therapeutically effective in the treatment of a

particular individual's disorder or condition will depend on the symptoms and severity of the disease, and can be determined by standard clinical techniques. In addition, *in vitro* or *in vivo* assays may optionally be employed to help identify optimal dosage ranges. The precise dose to be employed in the formulation will also
5 depend on the route of administration, and the seriousness of the disease or disorder, and should be decided according to the judgment of a practitioner and each patient's circumstances. Effective doses may be extrapolated from dose-response curves derived from *in vitro* or animal model test systems.

In one embodiment, a nucleic acid of the invention (e.g., a nucleic acid
10 encoding a PDE4D polypeptide, such as SEQ ID NO:1 which may optionally comprise at least one polymorphism shown in Tables 9 and 10; or another nucleic acid that encodes a PDE4D polypeptide or a splicing variant, derivative or fragment thereof, such as a nucleic acid encoding SEQ ID NO: 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 or 14) can be used, either alone or in a pharmaceutical composition as described above.
15 For example, PDE4D or a cDNA encoding the PDE4D polypeptide, either by itself or included within a vector, can be introduced into cells (either *in vitro* or *in vivo*) such that the cells produce native PDE4D polypeptide. If necessary, cells that have been transformed with the gene or cDNA or a vector comprising the gene or cDNA can be introduced (or re-introduced) into an individual affected with the disease.
20 Thus, cells which, in nature, lack native PDE4D expression and activity, or have mutant PDE4D expression and activity, or have expression of a disease-associated PDE4D splicing variant, can be engineered to express PDE4D polypeptide or an active fragment of the PDE4D polypeptide (or a different variant of PDE4D polypeptide). In a preferred embodiment, nucleic acid encoding the PDE4D
25 polypeptide, or an active fragment or derivative thereof, can be introduced into an expression vector, such as a viral vector, and the vector can be introduced into appropriate cells in an animal. Other gene transfer systems, including viral and nonviral transfer systems, can be used. Alternatively, nonviral gene transfer methods, such as calcium phosphate coprecipitation, mechanical techniques (e.g.,
30 microinjection); membrane fusion-mediated transfer via liposomes; or direct DNA uptake, can also be used.

Alternatively, in another embodiment of the invention, a nucleic acid of the invention; a nucleic acid complementary to a nucleic acid of the invention; or a portion of such a nucleic acid (e.g., an oligonucleotide as described below), can be used in "antisense" therapy, in which a nucleic acid (e.g., an oligonucleotide) which
5 specifically hybridizes to the mRNA and/or genomic DNA of PDE4D is administered or generated *in situ*. The antisense nucleic acid that specifically hybridizes to the mRNA and/or DNA inhibits expression of the PDE4D polypeptide, e.g., by inhibiting translation and/or transcription. Binding of the antisense nucleic acid can be by conventional base pair complementarity, or, for example, in the case
10 of binding to DNA duplexes, through specific interaction in the major groove of the double helix.

An antisense construct of the present invention can be delivered, for example, as an expression plasmid as described above. When the plasmid is transcribed in the cell, it produces RNA which is complementary to a portion of the
15 mRNA and/or DNA which encodes PDE4D polypeptide. Alternatively, the antisense construct can be an oligonucleotide probe which is generated *ex vivo* and introduced into cells; it then inhibits expression by hybridizing with the mRNA and/or genomic DNA of PDE4D. In one embodiment, the oligonucleotide probes are modified oligonucleotides which are resistant to endogenous nucleases, e.g.
20 exonucleases and/or endonucleases, thereby rendering them stable *in vivo*. Exemplary nucleic acid molecules for use as antisense oligonucleotides are phosphoramidate, phosphothioate and methylphosphonate analogs of DNA (see also U.S. Pat. Nos. 5,176,996; 5,264,564; and 5,256,775). Additionally, general approaches to constructing oligomers useful in antisense therapy are also described,
25 for example, by Van der Krol *et al.* ((1988) *Biotechniques* 6:958-976); and Stein *et al.* ((1988) *Cancer Res* 48:2659-2668). With respect to antisense DNA, oligodeoxyribonucleotides derived from the translation initiation site, e.g. between the -10 and +10 regions of PDE4D sequence, are preferred.

To perform antisense therapy, oligonucleotides (mRNA, cDNA or DNA) are
30 designed that are complementary to mRNA encoding PDE4D. The antisense oligonucleotides bind to PDE4D mRNA transcripts and prevent translation.

Absolute complementarity, although preferred, is not required. a sequence "complementary" to a portion of an RNA, as referred to herein, indicates that a sequence has sufficient complementarity to be able to hybridize with the RNA, forming a stable duplex; in the case of double-stranded antisense nucleic acids, a single strand of the duplex DNA may thus be tested, or triplex formation may be assayed. The ability to hybridize will depend on both the degree of complementarity and the length of the antisense nucleic acid, as described in detail above. Generally, the longer the hybridizing nucleic acid, the more base mismatches with an RNA it may contain and still form a stable duplex (or triplex, as the case may be). One skilled in the art can ascertain a tolerable degree of mismatch by use of standard procedures.

The oligonucleotides used in antisense therapy can be DNA, RNA, or chimeric mixtures or derivatives or modified versions thereof, single-stranded or double-stranded. The oligonucleotides can be modified at the base moiety, sugar moiety, or phosphate backbone, for example, to improve stability of the molecule, hybridization, etc. The oligonucleotides can include other appended groups such as peptides (e.g. for targeting host cell receptors *in vivo*), or agents facilitating transport across the cell membrane (see, e.g., Letsinger *et al.* (1989) *Proc. Natl. Acad. Sci. USA* 86:6553-6556; Lemaitre *et al.*, (1987), *Proc. Natl. Acad. Sci. USA* 84:648-652; PCT International Publication No. W088/09810) or the blood-brain barrier (see, e.g., PCT International Publication No. W089/10134), or hybridization-triggered cleavage agents (see, e.g., Krol *et al.* (1988) *BioTechniques* 6:958-976) or intercalating agents. (See, e.g., Zon, (1988), *Pharm. Res.* 5:539-549). To this end, the oligonucleotide may be conjugated to another molecule (e.g., a peptide, hybridization triggered cross-linking agent, transport agent, hybridization-triggered cleavage agent).

The antisense molecules are delivered to cells which express PDE4D *in vivo*. A number of methods can be used for delivering antisense DNA or RNA to cells; e.g., antisense molecules can be injected directly into the tissue site, or modified antisense molecules, designed to target the desired cells (e.g., antisense linked to peptides or antibodies that specifically bind receptors or antigens expressed on the

target cell surface) can be administered systematically. Alternatively, in a preferred embodiment, a recombinant DNA construct is utilized in which the antisense oligonucleotide is placed under the control of a strong promoter (e.g., pol III or pol II). The use of such a construct to transfect target cells in the patient results in the transcription of sufficient amounts of single stranded RNAs that will form complementary base pairs with the endogenous PDE4D transcripts and thereby prevent translation of the PDE4D mRNA. For example, a vector can be introduced *in vivo* such that it is taken up by a cell and directs the transcription of an antisense RNA. Such a vector can remain episomal or become chromosomally integrated, as long as it can be transcribed to produce the desired antisense RNA. Such vectors can be constructed by recombinant DNA technology methods standard in the art and described above. For example, a plasmid, cosmid, YAC or viral vector can be used to prepare the recombinant DNA construct which can be introduced directly into the tissue site. Alternatively, viral vectors can be used which selectively infect the desired tissue, in which case administration may be accomplished by another route (e.g., systematically).

Endogenous PDE4D expression can also be reduced by inactivating or "knocking out" PDE4D or its promoter using targeted homologous recombination (e.g., see Smithies *et al.* (1985) *Nature* 317:230-234; Thomas & Capecchi (1987) *Cell* 51:503-512; Thompson *et al.* (1989) *Cell* 5:313-321). For example, a mutant, non-functional PDE4D (or a completely unrelated DNA sequence) flanked by DNA homologous to the endogenous PDE4D (either the coding regions or regulatory regions of PDE4D) can be used, with or without a selectable marker and/or a negative selectable marker, to transfect cells that express PDE4D *in vivo*. Insertion of the DNA construct, via targeted homologous recombination, results in inactivation of PDE4D. The recombinant DNA constructs can be directly administered or targeted to the required site *in vivo* using appropriate vectors, as described above. Alternatively, expression of non-mutant PDE4D can be increased using a similar method: targeted homologous recombination can be used to insert a DNA construct comprising a non-mutant, functional PDE4D (e.g., a gene having SEQ ID NO:1 which may optionally comprise at least one polymorphism shown in

Tables 9 and 10), or a portion thereof, in place of a mutant PDE4D in the cell, as described above. In another embodiment, targeted homologous recombination can be used to insert a DNA construct comprising a nucleic acid that encodes a PDE4D polypeptide variant that differs from that present in the cell.

- 5 Alternatively, endogenous PDE4D expression can be reduced by targeting deoxyribonucleotide sequences complementary to the regulatory region of PDE4D (i.e., the PDE4D promoter and/or enhancers) to form triple helical structures that prevent transcription of PDE4D in target cells in the body. (See generally, Helene, C. (1991) *Anticancer Drug Des.*, 6(6):569-84; Helene, C., *et al.* (1992) *Ann. N.Y. Acad. Sci.*, 660:27-36; and Maher, L. J. (1992) *Bioassays* 14(12):807-15). Likewise, the antisense constructs described herein, by antagonizing the normal biological activity of one of the PDE4D proteins, can be used in the manipulation of tissue, e.g. tissue differentiation, both *in vivo* and *for ex vivo* tissue cultures. Furthermore, the anti-sense techniques (e.g. microinjection of antisense molecules, or transfection
- 10 with plasmids whose transcripts are anti-sense with regard to a PDE4D mRNA or gene sequence) can be used to investigate role of PDE4D in developmental events, as well as the normal cellular function of PDE4D in adult tissue. Such techniques can be utilized in cell culture, but can also be used in the creation of transgenic animals.
- 15 In yet another embodiment of the invention, other PDE4D therapeutic agents as described herein can also be used in the treatment or prevention of stroke. The therapeutic agents can be delivered in a composition, as described above, or by themselves. They can be administered systemically, or can be targeted to a particular tissue. The therapeutic agents can be produced by a variety of means,
- 20 including chemical synthesis; recombinant production; *in vivo* production (e.g., a transgenic animal, such as U.S. Pat. No. 4,873,316 to Meade *et al.*), for example, and can be isolated using standard means such as those described herein.

 A combination of any of the above methods of treatment (e.g., administration of non-mutant PDE4D polypeptide in conjunction with antisense therapy targeting

25 mutant PDE4D mRNA; administration of a first splicing variant encoded by PDE4D

30

in conjunction with antisense therapy targeting a second splicing encoded by PDE4D), can also be used.

The invention will be further described by the following non-limiting examples. The teachings of all publications cited herein are incorporated herein by
5 reference in their entirety.

EXAMPLES

EXAMPLE 1 IDENTIFICATION OF THE PDE4D GENE WITH LINKAGE TO STROKE

Icelandic Stroke Patients and Phenotype Characterization

10 A population-based list containing 2543 Icelandic stroke patients, diagnosed from 1993 through 1997, was derived from two major hospitals in Iceland and the Icelandic Heart Association (the study was approved by the Icelandic Data Protection Commission of Iceland and the National Bioethics Committee). Patients with hemorrhagic stroke represented 6% of all patients (patients with the Icelandic
15 type of hereditary cerebral hemorrhage with amyloidosis and patients with subarachnoid hemorrhage were excluded). Ischemic stroke accounted for 67% of the total patients and TIAs 27%. The distribution of stroke subtypes in this study is similar to that reported in other Caucasian populations (Mohr, J.P., *et al.*, *Neurology*, 28:754-762 (1978); L. R. Caplan, *In Stroke, A Clinical Approach*
20 (Butterworth-Heinemann, Stoneham, MA, ed 3, (1993))).

The list of approximately 2000 living patients was run through our computerized genealogy database. A comprehensive genealogy database that has been established at deCODE genetics, Inc. was used to cluster the patients in pedigrees. Each version of the computerized genealogy database is reversibly
25 encrypted by the Data Protection Commission of Iceland before arriving at the laboratory (Gulcher, J.R., *et al.*, *Eur. J. Hum. Genet.* 8:739 (2000)). The database uses a patient list, with encrypted personal identifiers, as input, and recursive algorithms to find all ancestors in the database who are related to any member on the

input list within a given number of generations back (Gulcher, J.R., and Stefansson, K., *Clin. Chem. Lab. Med.* 36:523 (1998)) covering the whole Icelandic nation. The cluster function then searches for ancestors who are common to any two or more members of the input list. One hundred and seventy-nine families with two or more
5 living patients were chosen for the study with a total of 476 patients connected within 6 meioses (6 meioses connect second cousins). Informed consent was obtained from all patients and their relatives whose DNA samples were used in the linkage scan. The mean separation between affected pairs is 4.8 meioses. Of the patients selected for the study 73% had ischemic strokes, 23% TIAs and 4%
10 hemorrhagic strokes.

In the selected families, hemorrhagic stroke patients clustered with ischemic stroke and TIA patients, and there were no families with a striking preponderance of hemorrhagic stroke or of the subtypes of ischemic stroke. Patients with ischemic stroke were reclassified according to the TOAST (Trial of Org 10172 in Acute
15 Stroke Treatment) sub-classification system for stroke (Adams, H.P., Jr., *et al.*, *Stroke*, 24:34-41 (1993)). This system includes five categories: (1) large-artery atherosclerosis, (2) cardioembolism, (3) small-artery occlusion (lacune), (4) stroke of other determined etiology and (5) stroke of undetermined etiology. The diagnoses were based on clinical features and on data from ancillary diagnostic studies.
20 Patients defined with large-artery atherosclerosis had clinical and brain imaging findings of cerebral cortical dysfunction and either significant (>70%) stenosis (this is a stricter criteria than used in TOAST where 50% stenosis is the cut-off) or occlusion of a major brain artery or branch cortical artery. Potential sources of cardiogenic embolism were excluded. The category cardioembolism included
25 patients with at least one cardiac source for an embolus and potential large-artery sources of thrombosis and embolism was eliminated. Patients with small-artery occlusion had one of the traditional clinical lacunar syndromes and no evidence of cerebral cortical dysfunction. Potential cardiac source of embolus and stenosis >70% in an ipsilateral extracranial artery was excluded. The category, acute stroke
30 of other determined etiology, included patients with rare causes of stroke and patients with two or more potential causes of stroke. If the causes of stroke could

not be determined despite extensive evaluation patients were included in the category stroke of undetermined etiology. Fig. 1A and Fig. 1B display two pedigrees each affected by several of the stroke subtypes, including hemorrhagic stroke. Apparently what is inherited in stroke is the broadly defined phenotype.

5 *Genome-wide scan*

A genome-wide scan was performed using a framework map of about 1000 microsatellite markers. The DNA samples were genotyped using approximately 1000 fluorescently labelled primers. A microsatellite screening set based in part on the ABI Linkage Marker (v2) screening set and the ABI Linkage Marker (v2) intercalating set in combination with 500 custom-made markers were developed. All markers were extensively tested for robustness, ease of scoring, and efficiency in 4X multiplex PCR reactions. In the framework marker set, the average spacing between markers was approximately 4 cM with no gaps larger than 10 cM. Marker positions were obtained from the Marshfield map (<http://research.marshfieldclinic.org/genetics>) except for a three-marker putative inversion on chromosome 8 (Jonsdottir, G.M., *et al.*, *Am. J. Hum. Genet.*, 67 (Suppl. 2):332 (2000); Yu, A., *et al.*, *Am. J. Hum. Genet.*, 67 (Suppl. 2):10 (2000). The PCR amplifications were set up, run and pooled on Perkin Elmer/Applied Biosystems 877 Integrated Catalyst Thermocyclers with a similar protocol for each marker. The reaction volume used was 5 µl and for each PCR reaction 20 ng of genomic DNA was amplified in the presence of 2 pmol of each primer, 0.25 U AMPLITAQ GOLD (DNA polymerase; trademark of Roche Molecular Systems), 0.2 mM dNTPs and 2.5 mM MgCl₂ (buffer was supplied by manufacturer). The PCR conditions used were 95°C for 10 minutes, then 37 cycles of 15 s at 94°C, 30s at 55°C and 1 min at 72°C. The PCR products were supplemented with the internal size standard and the pools were separated and detected on Applied Biosystems model 377 Sequencer using v3.0 GENESCAN (peak calling software; trademark of Applied Biosystems). Alleles were called automatically with the TRUEALLELE (computer program for alleles identification; trademark of Cybegenetics, Inc.) program (www.cybgen.com), and the program, DECODE-GT (computer editing program that works downstream

of the TRUEALLELE program; trademark of deCODE genetics, Inc.), was used to fractionate according to quality and edit the called genotypes (Palsson, B., *et al.*, *Genome Res.* 9:1002 (1999)). At least 180 Icelandic controls were genotyped to derive allelic frequencies.

5 A total of 476 patients and 438 relatives were genotyped. The data was analyzed and the statistical significance determined by applying affecteds-only allele-sharing methods (which does not specify any particular inheritance model) implemented in the ALLEGRO (computer program for multipoint linkage analysis; trademark of deCODE genetics, Inc.) program which calculates lod scores based on
10 multipoint calculations. Our baseline linkage analysis uses the S_{pairs} scoring function (Kruglyak, L., *et al.*, *Am. J. Hum. Genet.*, 58:1347 (1996)), the exponential allele-sharing model (Kong, A. and Cox, N.J., *Am. J. Hum. Genet.*, 61:1179 (1997)), and a family weighting scheme which is halfway, on the log scale, between weighting each affected pair equally and weighting each family equally. In the
15 analysis we treat all genotyped individuals who are not affected as "unknown". All linkage analyses in this paper were performed using multipoint calculation with the program ALLEGRO (deCODE genetics, Inc.) (Gudbjartsson, D.F., *et al.*, *Nat. Genet.* 25:12 (2000)) .

20 The allele sharing lod scores for the genome scan using the framework map showed three regions that achieved a lod score above 1.0. Two of these regions are on chromosome 5q. The first peak is at approximately 69 cM with a lod score of 2.00. The second peak is at 99 cM with a lod score of 1.14. The third region is on chromosome 14q at 55 cM with a lod score of 1.24.

25 The information for linkage at the 5q locus was increased by genotyping an additional 45 markers over a 45 cM segment which spanned both peaks. The information used here is defined by Nicolae (D. L. Nicolae, Thesis, University of Chicago (1999)) and has been demonstrated to be asymptotically equivalent to a classical measure of the fraction of missing information (Dempster, A.P., *et al.*, *J. R. Statist. Soc. B*, 39:1 (1977)). While the lod score at the second peak dropped slightly
30 to around 1.05, the lod score at the first peak increased to 3.39. However, close inspection of our results suggested that not only does the Marshfield genetic map

(<http://research.marshfieldclinic.org/genetics>) lack resolution (many markers assigned the same map location), but also there may be some errors in their order. As a result, the genetic length of the region estimated using our material was substantially greater than what is reported. By modifying the ALLEGRO (deCODE
5 genetics, Inc.) program, we applied the EM algorithm to our data to estimate the genetic distances between markers. We found that our estimate of the genetic length of the region was substantially longer than that given in the Marshfield map. This indicates a problem with marker order because, in general, incorrect marker order leads to an increased number of apparent crossovers and increases the apparent
10 genetic length.

Physical and genetic mapping

The marker order and inter-marker distances were improved by constructing high density physical and genetic maps over a 20 cM region between markers D5S474 and D5S2046. A combination of data from coincident hybridizations of
15 BAC membranes using a high density of STSs and the Fingerprinting Contig database was used to build large contigs of BACs from the RPCI -11 library. The order of the linkage markers was also confirmed by high-resolution genetic mapping using the stroke families supplemented with over 112 other large nuclear families (Fig. 3). High resolution genetic mapping was used both to anchor and place in
20 order contigs found by physical mapping as well as to obtain accurate inter-marker distances for the correctly ordered markers. Data from 112 Icelandic nuclear families (sibships with their parents, containing from two to seven siblings) were analyzed together with the nuclear families available within the stroke pedigrees. For the purpose of genetic mapping the 112 nuclear families alone provide 588
25 meioses, and the total number of meioses available for mapping was over 2000. By comparison, the Marshfield genetic map was constructed based on 182 meioses. The large number of meiotic events within our families provides the ability to map markers to the resolution of 0.5 to 1.0 cM. Combining this information with the physical map resulted in a highly reliable order of markers and inter-marker
30 distances within this 20 cM region. Linkage markers common to the genetic and

physical maps were used to anchor and place in order four of the physically mapped contigs. By integrating the genetic and physical maps a most likely order of 30 polymorphic markers was derived (Fig. 3).

BAC contigs were generated by a method that combines coincident primer
5 hybridization with data mining. The RPCI-11 human male BAC library segments 1
& 2 (Pieter de Jong, Children's Hospital Oakland Research Institute) containing
about 200,000 clones with a 12X coverage, were gridded using a 6x6 double offset
pattern in 23 cm x 23 cm membranes with a BioGrid robot (Biorobotics Ltd.,
Cambridge, UK). Initially, hybridizations were performed with markers in the
10 region of interest according to their location in the Weizmann Institute Unified
Database (<http://bioinformatics.weizmann.ac.il/udb/>). Primer sequences were
analyzed and discarded according to their content of known repeats, *E. coli* and
vector sequences (the analysis was performed using software developed at deCODE
genetics). One hundred and fifty markers in the region (30 polymorphic markers
15 used in linkage and 120 generated from STSs) separated by an average of 130 kb
were used. The selected markers were used to generate two ³²P labelled probes, F
that contained the pooled forward primers and R that contained the pooled reverse
primers. Reading of positive signals was performed automatically from digitized
images of resulting autoradiograms by informatics tools developed at deCODE
20 genetics. The coincident signals in both hybridizations were selected as positive
clones. A set of overlapping clones was assembled through a combination of
hybridization and BAC fingerprint walking. Fingerprints of positive clones were
analyzed using the FPC database developed at the Sanger Center. Data from FPC
contigs prebuilt with a cutoff of 3e-12 and from sequence datamining was integrated
25 with the hybridization results. BACs in the region detected by data mining and
hybridization were re-arrayed using a Multiprobe IIx robot (Packard, Meriden, CT).
Small membranes (8 cm x 12 cm) were gridded in 6x6 double offset pattern and
individually hybridized with the markers of interest. Positive patterns were
transferred using transparencies to an Excel file containing macros to provide BAC
30 to marker associations. A visual map was generated by combining the hybridization,
fingerprinting and sequence data. New markers were generated from BAC end

sequences to close the gap. After several rounds of hybridization positive BACs were assembled into 7 contigs covering approximately 20 Mb. Thirty of the polymorphic markers used in linkage were assigned to four of the contigs (Fig. 3). Estimation of contig lengths and distance between markers assigned to them was
5 based on the FPC program.

Twenty - seven of our 30 linkage markers mapped to three contigs in the October 2000 release from UCSC, the UC Santa Cruz (UCSC) draft assembly (<http://genome.ucsc.edu/>). The marker order within the contigs is in agreement with our order with the exception of two markers. Although the UCSC assemblies are
10 improving, some contigs have incorrect order, orientation, or contig assembly. We believe that high resolution genetic mapping and perhaps focused hybridization experiments are still necessary to confirm accuracy of sequence assemblies. In addition, high resolution genetic mapping provides better estimates of inter-marker genetic distances that are also important for linkage analysis (Halpern, J. and
15 Whittermore, A.S., *Hum. Hered.* 49:194 (1999); Daw, E.W., *et al.*, *Genet. Epidemiol.* 19:366 (2000)).

Final linkage results and localization

Linkage analysis including genotypes from the higher density markers using the deCODE marker order resulted in a lod score of 4.40 ($P = 3.9 \times 10^{-6}$) on
20 chromosome 5q12 at the marker D5S2080. The reported P value is part of the output of the ALLEGRO (deCODE genetics, Inc.) program. It is obtained by comparing the observed lod score to the distribution of the lod score calculated under the null hypothesis of no linkage and the assumption that the descent information is complete. In this case, it agrees very well with the P value that one
25 would obtain by large sample approximation. The allele sharing lod score is the log, base 10, of an one-degree of freedom likelihood ratio. Hence, with a one-sided test, a lod score of 4.03 corresponds to a Z score of $\sqrt{2 \cdot \log(10) \cdot 4.03} = 4.31$. Normal approximation gives a P value of 8.2×10^{-6} . The locus has been designated as *STRK1*. With the addition of these extra markers, it was possible to narrow down
30 the region to a segment less than 6 cM, from D5S1474 to D5S398, as defined by one

drop in lod. Analyses using the marker orders based on publicly available marker maps gave lower lod scores, ranging from 2.78 to 3.94.

To further investigate the contribution of this susceptibility locus to stroke, a range of parametric models were fitted to the data. However, all analyses were still
5 *affecteds only* in the sense that individuals were either classified as affecteds or having unknown disease status. A lod score of 4.08 was obtained with a dominant model where the allele frequency of the susceptibility gene was assumed to be 5% and carriers of the mutation were assumed to have seven-fold the risk of a non-carrier. By inspecting the individual families, no obvious correlation was seen
10 between families which contribute positively to the linkage results with the prevalence of hypertension, diabetes or hyperlipidemias. When the data were reanalyzed with the hemorrhagic stroke patients removed, the allele sharing lod score increased to 4.86 at D5S2080. Although this 0.46 increase in log score suggests that *STRK1* is involved primarily in ischemic stroke and TIAs, it is not
15 statistically significant based on simulations (one sided P equals 0.09). In order to assess whether such a change in lod score would be likely to occur by chance we selected 1000 random sets of 22 patients whose status we then changed to "unknown" in an analysis. The P value we present is the fraction of the 1000 simulations which produce a lod score increase at the peak locus equal to or greater
20 than that which we observed by changing the affection status of the 22 hemorrhagic stroke patients to "unknown".

Identification of Allelic Association

All microsatellite markers in the approx. 6 cM interval (Fig. 3, markers from D5S398 to D5S1474) were analysed with respect to allelic association.

Table 1. The association of a fixed allele, with the stroke patients compared with population controls.

Marker	Location (cM)	Allele (A)	p-value	Risk ratio	Total no. of patients	Patients with A	Total no. of controls	Controls with A
AC022125-3	68.3	0	2.83e-03	1.28	749	412	504	251
D5S2000	68.5	0	3.26e-03	1.27	717	302	555	196
D5S2091	68.6	0	5.44e-04	1.30	757	342	534	198
D17-C	68.8	0	1.91e-03	1.34	721	436	469	249
D17-B	68.9	0	1.30e-03	1.26	680	556	509	387
AC008818-1	72.7	0	3.26e-03	1.42	739	379	619	259
D5S1990	73.9	20	3.68e-03	1.68	756	75	623	36

Comment:

The alleles have conventional values resulting after subtracting the CEPH data.

Identification of Microsatellite and SNP Haplotypes Within the Gene

Fig. 5 shows a schematic representation of the genetic map showing microsatellite and SNP haplotypes in the region of the stroke gene. Seven haplotypes are shown from the association study of Icelandic patients (804 patients).

- 5 The haplotypes indicated as SW-1 and SW-2 are from an association study on Swedish stroke patients.

- 10 A total number of 804 Icelandic patients were analyzed for microsatellite single marker and multimarker association. The number of controls used in the analysis was 504. Each patient had 2 or more close relatives genotyped in order to derive haplotypes. The haplotypes were derived using ALLEGRO based haplotype analysis (results shown in Table 2).

Table 2
Icelandic Patient Association

Markers	Alleles	pAllelic	All Frq Aff	All Frq Ctrl	pCarrier	Carr Frq Aff	Carr Frq Ctrl	# aff	# ctrl
All patients (n=804)									
D5S2000	0	1.12E-04	0.24	0.18	5.36E-04	0.43	0.33	744	429
D5S2091	0	5.28E-04	0.26	0.21	6.10E-04	0.46	0.37	770	478
AC022125-3	0	5.96E-04	0.33	0.27	3.24E-04	0.55	0.45	774	489
D17-C	0	9.93E-04	0.36	0.29	0.007	0.6	0.52	756	395
AC008833-6	0	0.0013	0.67	0.61	0.018	0.88	0.84	781	472
AC008818-1	0	0.0014	0.29	0.24	7.13E-04	0.51	0.41	773	482
AC008829-5	2	0.0063	0.03	0.015	0.005	0.06	0.03	645	474
(1) D5S2000 D5S2091 D17-C D17-B	0000	0.0018	0.17	0.11	0.004	0.3	0.22	552	325
(2) D5S2091 D17-C D17-B	000	9.06E-04	0.19	0.13	0.001	0.34	0.25	597	380
(3) AC008829-5 AC008833-2 AC008833-3	20 14 6	0.0017	0.01	0.002	0.002	0.029	0.004	579	431
(4) AC022125-3 AC008833-6 D5S2000 D5S2091 D17-C	00000	0.00374	0.17	0.13	0.012	0.32	0.24	629	317
(5) D5S2071 AC008879-2 AC008818-1 AC008879-3	-2 0 0 0	0.0031	0.05	0.02	0.004	0.09	0.044	489	362
(6) AC008879-2 AC008818-1 AC008879-3	0 0 0	9.25E-04	0.29	0.23	5.82E-04	0.5	0.4	621	443
(part 7) D5S2107 AC008829-5 AC008833-2	4 2 0	0.0097	0.007	0	0.009	0.01	0	540	422

Swedish patients have also been genotyped and microsatellite single and multimarker association has been analyzed using the E-M algorithm. A total number of 943 Swedish patients (stroke patients and patients with carotid stenosis) and 322 Swedish controls were analyzed (results shown in Table 3).

Table 3
Swedish Patient Association

Markers	Alleles	pAllelic	All Frq Aff	All Frq Ctrl	# aff	# ctrl
Swedish patients (n=943)						
D5S2000	2	2.39E-03			912	318
(Sw 2) AC022125-3 AC008833-6 D5S2000 D5S2091	0 0 2 0	6.0E-03	0.035	0.014	717	284
(Sw-1) AC008804-2 D17-H D17-G D5S2080	-2 4 -2 10	2.8E-03	0.057	0.053	672	113
AC008804-2 D17-H D17-G	-4 0 -2	3.7E-03	0.056	0.033	700	123

SNP haplotypes within the PDE4D gene have been identified. A total of 95 SNP's typed for approximately 500 patients and 140 controls and E-M algorithm was used to analyze the genotype (results shown in Table 4). Selected SNP's found in excess in patients (based on the E-M algorithm) were typed for a subset of
5 relatives in order to derive haplotypes for haplotype analysis (results are shown in Table 5). SNP haplotypes 1 and 2 are located upstream of D6 exon, SNP haplotype 3 is located upstream of D8 exon and stretches over it, SNP haplotype 4 stretches over LF1 exon.

Table 4
SNP genotype analysis based E-M algorithm

SNP haplotype	Position	Alleles in Haployp _{te}	pAllelic	All Frq Aff	All Frq Ctrl	#Aff	#Ctrl
SNP-1	1273143- 1269965	122303	9.9E-03	0.32	0.25	505	155
SNP-2	1260358- 1254849	10323	2.8E-02	0.33	0.26	631	131
SNP-3	1399767- 1318510	2313002	8.9E-03	0.26	0.18	759	149
SNP-4	1422008- 1410824	111330	3E-02	0.56	0.48	344	128

Table 5A
SNP haplotype analysis

SNP haplo- type	Position	Alleles in haplo- type	pAllelic	All Frq Aff	All Frq Ctrl	Carr Frq Aff	Carr Frq Ctrl	# Aff	# Ctrl
SNP-1	1273143- 1269965	122303	4.27E-04	0.31	0.18	0.49	0.308	111	149
SNP-2	1260358- 1254849	10323	0.0043	0.32	0.2	0.508	0.35	114	128

Table 5B
SNPs in the identified SNP haplotypes

Haplotype	SNP	Public name if available	Polymorphism	position	Allele
SNP-2	1	new	T/C	1254849	3
SNP-2	2	new	A/G	1257206	2
SNP-2	3	TSC0538885	T/C	1257624	3
SNP-2	4	new	A/C	1259581	0
SNP-2	5	rs244579	T/C	1260358	1
SNP1	1	rs35284	T/C	1269965	3
SNP1	2	rs35283	A/G	1270041	0
SNP1	3	rs35281	A/G	1270553	3
SNP1	4	rs35280	G/A	1272125	2
SNP1	5	new	A/G	1272910	2
SNP1	6	rs35279	G/C	1273143	1
SNP3	1	rs255652	A/G	1318510	2
SNP3	2	rs27547	G/A	1371388	0
SNP3	3	rs26695	G/A	1390407	0
SNP3	4	rs27773	C/T	1391020	3
SNP3	5	rs1471430	C/G	1391818	1
SNP3	6	rs26705	C/T	1392198	3
SNP3	7	rs26701	G/C	1399767	2
SNP4	1	rs464311	A/G	1410824	0
SNP4	2	rs1867725	T/C	1412604	3
SNP4	3	rs153966	T/C	1414091	3
SNP4	4	new	C/T	1414804	1

Table 6A and 6B show previously known microsatellite markers and novel microsatellites in sequence. Forward and reverse primers are shown.

Table 6A Previously Known microsatellite markers in sequence

	Accession number	Forward primer	SEQ ID NO.	Reverse primer	SEQ ID NO.
D5S2107	GDB:614475	AGCCTTTGGGCCAACA	15	CAAACCAACAGGAGTATGTACTTTT	16
D5S468	GDB:593646	AAATGAATGGTAGATTTAACCTGAG	17	TGGGAAAATAAATACATGCC	18
D5S2000	GDB:608769	TTATACCAGGAGAGTAGACTTTTTT	19	CATGCTAATTTCAAAATATGAGAG	20
D5S2091	GDB:613806	GCAATTTGTCAATGTGCCA	21	GGTATTTTCATTCACAGCCAGTC	22
D5S2500	GDB:683034	TTAAAGGAGTGATCTCCCCC	23	GTTACAGTACCTATGGTCATGCC	24
D5S2080	GDB:613188	GCACTGTGAATTTCAAATG	25	GTCAGGGGACTGGGAT	26
D5S2018	GDB:609957	CCTGTAAACAATGAAAACCCACTGA	27	AGACTATGCTGTGTGTGTCCTG	28
D5S2071	GDB:612756	TCTGGGTTTACAACCTTCAAA	29	TAACTGGCTTGGCCCG	30

Table 6B Novel microsatellites in sequence:

	Forward primer	SEQ ID NO.	Reverse primer	SEQ ID NO.
DG5S382	CAGTAAATAGTTTGCTTCAGGCATT	31	CTCATACTCTGCGTGGCTTG	32
AC008829-5	AGGGCTAAGTGGATCACAGC	33	AGAGGGTCTTGCCACTGTGT	34
AC008833-2	TCTGCAAGACTCTGGTGCT	35	TGCAGATCTCATATTTCCATGTTT	36
AC008833-3	TCTGCCCTTTGTTCCTCATC	37	GTCAAAGGAGTGATGGCAGT	38
AC022125-3	AAATGACTGCTCCCAAA	39	GGGAAATCATACTGCCCTCA	40
AC008833-6	AAACATAGCCACCCTGTTC	41	TCCAAAGCCCTTAGCTTAATCA	42
D17-C	GCTCCCTGGACTGTGGTAA	43	GCCACATTGCTGTCACATTT	44
D17-B	TTTTTCAGGGCTGGTAGAA	45	TCCAAAGGAAAGTGAAATCAGTG	46
D17-D	CTAACCCATCCTCACCCAAAT	47	TGTGGCATACAGGGAAGTGA	48
AC008804-1	GTGCTGGAAATTTGGCTCCTA	49	CAACATCATTTTGCCCTGC	50
AC008804-2	TCCCAACGATAGCTGTTC	51	GAATTAGGACGGTGGCTCAA	52
AC008804-3	TTTGCAATTCATCACTCATTCG	53	CCCGTAGCATCTGATCCAGT	54
D17-H	AGAAAGCTTCCCCTCCACTG	55	CATTCAGCCTGAGCTACAA	56
D17-G	TGGGCTCCAATTATCCTTCC	57	TGCAGTTTGCACCTCTCCTTG	58
AC027322-12	TTATCTGTTCCCATGCTTTT	59	TGTTACATCTTGATCTATGACGTTT	60
AC027322-10	TGTATCCTGCATCCCTTGT	61	GGAATAACCCCAAAAGTAATTGTAGTGA	62
AC027322-9	TCGTGCCAAGATGAAATGA	63	AAACCTCCCTGATCATCTGAA	64
AC027322-8	ACAGAGGAGCAAAAGGAATCA	65	TTGGCACGAATCAGCTCTCTG	66
AC027322-3	CCCCAATTGGATGATGGTAA	67	TGAGAACATCTAACGCTTTTTTCAA	68
AC027322-5	GGCACAGATAACTGGGAAGC	69	CCCCCAAAGTACTGCATAAA	70
DG5S397	ATGTTGGCAATTGGTGAGGT	71	CACCTGTCCCTTTGGAGGTA	72
AC008879-2	TTTTAAACGTGAAAAGTACAAGTTGC	73	ACAAAAGAGCACCTTTCCAGTG	74
AC008818-1	TGCTTGGTGAAGGAATAGCC	75	GAGCCTGGGTTCTCAGGAAT	76
AC008879-3	GGCAAGAACAGTTTGGAGGA	77	GACTGCTGTTTGCTGTTGA	78
AC020733-1	AAATGGCTATAAAGTGCTTTGAAC	79	CGGTCTCAACAACCCAGAAC	80
AC016591-2	CAGAAACACACAGAAGTCATTCAA	81	CAGACCCAAATTAATGGCAAAA	82
DG5S405	TCTGTCTTCTTTGACCCCATGAAT	83	CAACACAGCGAGACCTTCATC	84

Discussion of Stroke Locus Identification

Genealogy, a comprehensive population based list of broadly defined stroke patients and non-parametric allele sharing methods have been combined to successfully map a major gene for one of the most complex diseases known. There was no

5 correlation between the contribution of the families to the locus and hypertension, diabetes or hyperlipidemias and this locus does not match any known gene contributing to these risk factors. The types of stroke studied in this work do not reflect a rare or Icelandic-specific form of stroke; rather, the diversity of the stroke phenotypes in Icelanders as well as risk factors are similar to those of most other Caucasian

10 populations (Agnarsson, U., *et al.*, *Ann. Intern. Med.*, 130:987 (1999); Eliasson, J.H., *et al.*, *Læknablaðið*, 85:517-25 (1999); Sveinbjörnsdóttir, S., *et al.*, Systematic registration of patients with Stroke and TIA admitted to The National University Hospital, Reykjavik, Iceland, in 1997, XIII. Meeting of the Icelandic Association in Internal Medicine, Akureyri, Iceland (*Læknabladid*, 1998); Valdimarsson, E.M., *et al.*,

15 *Læknabladid* 84:921 (1998)).

The known genetic factors contributing to common stroke may do so indirectly by increasing the risk of some of its risk factors such as diabetes, hyperlipidemias, and hypertension. It is possible that there are genetic factors for stroke that do not influence susceptibility to the known risk factors, as has been suggested by epidemiologic studies

20 for myocardial infarction (Friedlander, Y., *et al.*, *Br. Heart J.*, 53:382 (1985); Shea, S., *et al.*, *J. Am. Coll. Cardiol.*, 4:793 (1984); Myers, R.H., *et al.*, *Am. Heart J.*, 120:963 (1990)). Epidemiological studies of the common forms of stroke have given conflicting results regarding the role of family history. Some studies have shown that parental history predicts the risk of stroke independently from conventional risk factors (Liao,

25 D., *et al.*, *Stroke*, 28:1908 (1997); Jousilahti, P., *et al.*, *Stroke*, 28:1361 (1997)) whereas others have failed to find evidence for such independent factors (Graffagnino, C., *Stroke*, 25:1599 (1994); Kiely, D.K., *et al.*, *Stroke*, 24:1366 (1993); Lindstrom, E., *et al.*, *Neuroepidemiology*, 12:37 (1993).

The work described herein is the first reported genome scan searching for genes that contribute to stroke as defined as a public health problem. The data reported herein suggests that the mapped gene contributes directly to stroke without contributing indirectly through its known risk factors. This suggests that there may be other
5 biological pathways contributing to the pathogenesis of stroke.

EXAMPLE 2 IDENTIFICATION OF THE PDE4D GENE

Sequence of the Candidate Region

We have sequenced approximately 3 Mb of the area defined by one drop in lod (Fig. 3, the genetic map of the region). The BAC (bacterial artificial clones) sequenced
10 in house are shown in Table 7A. We also used for the assembly the following publicly available BAC sequences from GenBank listed in Table 7B for the assembly. The BAC clones we sequenced are from the RCPI-11 Human BAC library (Pieter deJong, Roswell Park). The vector used was pBACe3.6. The clones were picked into a 96 well microtiter plate containing LB/chloramphenicol (25 µg/ml)/glycerol (7.5%) and stored
15 at -80°C after a single colony has been positively identified through sequencing. The clones can then be streaked out on a LB agar plate with the appropriate antibiotic, chloramphenicol (25 µg/ml)/sucrose (5%).

Table 7A

Sequenced at Decode (BAC name)	Comment	Accession number
RP11-621C19	1	AC020733
RP11-113C1	2	
RP11-412M9	2	
RP11-151G2	2	
RP11-151F7	2	
RP11-281M3	2	
RP11-421L6	2	
RP11-68E13	2	
RP11-379P8	2	
RP11-1A7	1	AC008111
RP11-422K3	2	
RP11-116A3	2	

Key to "Comment" column:

1= This BAC has a publicly available sequence,

it was sequenced at Decode to make sure the sequence was correct

2= Only BAC end-sequence available for this BAC publicly.

Table 7B

Sequences available from

GenBank (BAC name)	Accession number	Status of sequence
RP11-621C19	AC020733	17 unordered pieces
CTD-2003D5	AC016591	complete sequence
CTD-2210C1	AC008879	7 unordered pieces
CTD-2124H11	AC008818	complete sequence
CTD-2301A11	AC008934	complete sequence
RP11-16B11	AC011929	7 unordered pieces
CTC-261E10	AC026693	complete sequence
CTD-2027G10	AC027322	complete sequence
RP11-1A7	AC008111	8 unordered pieces
CTD-2122K7	AC012315	complete sequence
CTD-2085F10	AC008804	complete sequence
CTD-2040J22	AC008791	complete sequence
RP11-235N16	AC020975	16 ordered pieces
CTD-2146O16	AC008833	complete sequence
CTD-2084I4	AC022125	17 ordered pieces
CTD-2140K22	AC008829	26 ordered pieces
CTD-2124D11	AC020924	7 ordered pieces
RP11-731H6	AC026095	21 unordered pieces

Gene identification

The gene, human cAMP specific phosphodiesterase 4D (HPDE4D) was identified in the sequenced region (Fig. 3). Twenty-three exons have been identified,

eighteen of those have previously been published. See top of Fig. 4. Five new spliced exons have been identified (referred to as 4D6, 4D7-1, 4D7-2, 4D7-3 and 4D8) in three new isoforms (PDE4D6, PDE4D7 and PDE4D8). The genomic sequence is approximately 1,691,140 bases in length.

The exon locations are indicated in Table 8 below.

Table 8

Exon	Start	End
(New) 4D7-1	142207	142328
(New) 4D7-2	444645	444775
(New) 4D7-3	641649	641878
4D4	736254	737226
4D5	861791	862202
4D3	1044051	1044190
(New) 4D6	1273404	1273709
(New) 4D8	1354347	1355128
LF1	1414511	1414702
LF2	1436943	1436979
LF3	1472965	1473235
LF4	1449835	1449542
N3	1539259	1539302
4D1/D2	1591172	1591425
ex3	1636944	1637037
ex4	1638406	1638578
ex5	1639508	1639606
ex6	1640491	1640655
ex7	1641818	1641917
ex8	1653070	1653224
ex9	1653943	1654065
ex10	1654576	1654758
ex11	1655335	1655747

The markers showing the highest association are located within the PDE4D (Table 1, Fig. 3 and Table 5), as follows:

AC022125-3, 21 000 bp upstream of the LF1 exon
 D5S2000, 37 000 bp downstream of PDE4D6 exon
 D5S2091, 30 000 bp downstream of PDE4D6 exon
 D17-C, 21 000 bp upstream of PDE4D6 exon
 D17-B, 31 000 bp upstream of PDE4D6 exon
 AC008833-6, 35 000 bp downstream of PDE4D8 exon
 AC008818-1, 3000 pb upstream of PDE4D7-1 exon
 AC008829-5, 89 000 bp upstream of PDE4D1/D2 exon
 Haplotype (1) and (2) are located upstream of and stretch over the PDE4D6 exon
 Haplotype (3) is located upstream of and stretches over the LF2-LF4 exons
 Haplotype (4) stretches over PDE4D6 and PDE4D8 exons
 Haplotype (5) stretches over PDE4D7-1 to PDE4D7-3 exons
 Haplotype (6) stretches over PDE4D7-1 exon
 Haplotype (7) stretches over LF2-exons 11

A contig for the incomplete genomic sequence of the PDE4D gene was submitted in November 2000 (GenBank entry NT_023193 by International Human Genome Project collaborators). The size of the contig is 614 481 bp (including gaps) whereas our genomic sequence for the whole PDE4D region (i.e., from the first exon for PDE4D variant) is close to 1,700,000 bp. The contig NT_023193 comprises only 11 exons of the PDE4D gene (in Fig. 4, exons 4D1/D2 - 11) and the 5' differently spliced exons are missing in the contig (in Fig. 4, exons 4D4, 4D5, 4D3, 4D6, 4D8, 4D7-1, 4D7-2, 4D7-3, LF1, LF2, LF3 and LF4).

SNPs (single nucleotide polymorphisms) detected in the sequence and mutation analysis

Publically available and novel SNP's in the PDE4D2 gene from mutation screening of all exons are illustrated in Tables 9 and 10.

Gene Identification

The identified gene PDE4D is a member of the cyclic nucleotide phosphodiesterases (PDEs). Intracellular levels of cyclic AMP and cyclic GMP are mediated by the PDEs. Cyclic nucleotides are important second messengers that regulate and mediate a number of cellular responses to extracellular signals, such as hormones, light and neurotransmitters. Intracellular levels of cAMP play a key role in the function of inflammatory and immune cells. One of the mechanisms that mediate relaxation of vascular muscle in cerebral circulation is the production of cAMP.

PDE4D Structure and Splice Forms

Phosphodiesterases are the mammalian homolog of the “dunce” gene in *Drosophila melanogaster*, implicated in learning and memory (Davis, R.L. and B. Dauwalder, *Trends Genet.*, 7(7):224-229 (1991)). PDEs are members of a large superfamily of isoenzymes subdivided into 9 and possibly 10 distinct families (Conti, M. and S.L. Jin, *Prog. Nucleic Acid Res. Mol. Biol.*, 63:1-38 (1999)), with several genes in each family and more than one isoform for each gene. The significance of the diversity of PDEs is not known but many of the isoforms differ in their biochemical properties, phosphorylation, intracellular targeting, protein-protein interactions and patterns of expression in tissues, which suggests that each of the various isoforms might have distinct functions (Bolger, G.B., *Cell Signal*, 6(8):851-859 (1994); Conti, M., *et al.*, *Endocr. Rev.*, 16(3):370-378 (1995)).

There are four genes that encode the type 5 PDEs (PDE4A, PDE4B, PDE4C and PDE4D), which is a group of enzymes characterized by high affinity for cAMP. The gene for PDE4D was assigned to human chromosome 5q12 (Milatovich, A., *et al.*, *Somat. Cell Mol. Genet.*, 20(2):75-86 (1994); Szpirer, C., *et al.*, *Cytogenet. Cell Genet.*, 69(1-2):22-14 (1995)) and 5 distinct splice variants have been characterized (the short forms PDE4D1, PDE4D2 and the long forms PDE4D3, PDE4D4, and PDE4D5) (Bolger, G.B., *et al.*, *Biochem. J.*, 328(Pt.2):539-548 (1997)) (Fig. 4). The sequence of

the human PDE4D variants show a high degree of homology to the PDE4Ds expressed in mouse and rat. The pattern of splicing and different promoter usage is highly conserved during evolution indicating an important physiological role (Nemoz, G., et al., *FEBS Lett.*, 384(1):97-102 (1996)). The PDE4D variants are generated at two major boundaries present in the gene. The first boundary corresponds to the junction of exon 2. Differential splicing in this region generates the 2 short variants PDE4D1 (586 a.a.) and PDE4D2 (508 a.a.)(Fig. 4). This splicing boundary is conserved in mouse, rat and between different human PDE4 genes. The splicing variant PDE4D2 is generated by the removal of 256 bp from the PDE4D1 sequence. The initiation codon in the PDE4D2 variant lies within exon D1/D2. Data demonstrates that the expression of the short PDE4D variants is under the control of an internal promoter regulated by cAMP (Vicini, E. and M. Conti, *Mol. Endocrinol.*, 11(7):839-850 (1997)). The second major splicing boundary is also conserved during evolution and is identical to that described in the *Drosophila dunce* gene. Splicing occurs at the intron/exon boundary at the LF1 exon (Fig. 4).

PDE function

The PDEs serve at least four major functions in the cell. They can (1) act as effector of signal transduction by interacting with receptors and G-proteins; (2) integrate the cyclic nucleotide-dependent pathway with other signal transduction pathways; (3) function as homeostatic regulators, playing a role in feedback mechanisms controlling cyclic nucleotide levels during hormone and neurotransmitter stimulation; (4) play an important role in controlling the diffusion of cyclic nucleotides and in creating subcellular domains or channeling cyclic nucleotide signaling (Conti, M. and S.L. Jin, *Prog. Nucleic Acid Res. Mol Biol.*, 63:1-38.(1999)). Inhibition of PDE has long been recognized as an effective pharmacological strategy to alter intracellular cyclic nucleotide levels (Flamm, E.S., et al., *Arch. Neurol.*, 32(8):569-71 (1975)).

It has been reported that PDE4 is the predominant isozyme regulating vascular tone mediated by cAMP hydrolysis in cerebral vessels (Willette, R.N., *et al.*, *J. Cereb. Blood Flow Metab.*, 17(2):210-9 (1997)).

A recent study on mice with targeted disruption of PDE4D gene (Hansen, G., *et al.*, *Proc. Natl. Acad. Sci. U S A*, 97(12):6751-6 (2000)) has demonstrated a crucial role of PDE4D in the control of smooth muscle contraction and muscarinic cholinergic receptor signaling but not in the control of airway inflammation. The lung phenotype of the PDE4D^{-/-} mice demonstrates that this gene plays a nonredundant role in cAMP homeostasis. There is a significant reduction in PDE activity and an increase in resting and stimulated cAMP levels in the lung, indicating that other PDE4s (or other PDEs) are not up-regulated and cannot compensate for the loss of PDE4D. These findings support that PDE4D serves a unique, nonoverlapping functions in cell signalling.

No clear link between an established inherited disorder and known PDE loci has emerged, with the exception of PDE6. Inhibitors of PDEs have been shown to affect airway responsiveness and pulmonary allergic inflammation (Schudt, C., *et al.*, *Pulm. Pharmacol. Ther.*, 12(2):123-9 (1999)). There are reports suggesting that altered PDE4 function may be linked to nephrogenic diabetes insipidus (Takeda, S., *et al.*, *Endocrinology*, 129(1):287-94 (1991)) or atopic dermatitis (Chan, S.C., *et al.*, *J. Allergy Clin. Immunol.*, 91(6):1179-88 (1993)), however no mutations have been identified. It has also been reported that that vasorelaxation modulated by PDE4 (not mentioned whether it is A, B, C or D gene family) is compromised in chronic cerebral vasospasm associated with subarachnoid hemorrhage (Willette, R.N., *et al.*, *J. Cereb. Blood Flow Metab.*, 17(2):210-9 (1997)). PDE4D itself has not been linked to stroke before.

PDE4D expression and cellular localization

PDE4Ds are expressed in human peripheral mononuclear cells (Nemoy, G., *et al.*, *FEBS Lett*, 384(1):97-102 (1996)), brain (Bolger, G., *et al.*, *Mol. Cell Biol.*, 13(10):6558-71 (1993)), heart (Kostic, M.M., *et al.*, *J. Mol. Cell Cardiol.*,

29(11):3135-46 (1997)) and vascular smooth muscle cells (Liu, H. and D.H. Maurice, *J. Biol. Chem.*, 274(15):10557-65 (1999)).

Immunoblotting of rat brain has shown that the PDE4D3, PDE4D4 and PDE4D5 proteins are present in brain (Bolger, G.B., *et al.*, *Biochem. J.*, 328(Pt 2):539-48 (1997)) and are expressed in cortex and cerebellum from rat (Iona, S., *et al.*, *Mol. Pharmacol.*, 53(1):23-32 (1998)). These proteins were recovered mostly or exclusively in the particulate fraction suggesting that these forms may be targeted to insoluble cellular structures. In addition a 68 kDa protein was detected which could represent PDE4D1, PDE4D2 or both. To verify this RT-PCR was performed on mRNA from rat brain and the results showed that transcripts for PDE4D1 and 2 were present. Their data also suggests that the N-terminal regions of the PDE4D3-5, derived from alternatively spliced regions of their mRNAs, are important in determining their subcellular localization activity and differential sensitivity to inhibitors and there are indications that there is a propensity for the long PDE4D isoforms to interact with particulate fraction of the cell.

Newly identified isoforms

Five new exons have been identified. Exon D6 was identified by deCODE (in silico) and verified by RT-PCR. The four other new exons have been identified using CAP-RACE amplification from cultured cells with an "long-form 1"-specific reverse primer. Three of these exons are spliced to one another and together onto LF1 and this new isoform was given the name D7. The fourth new 5' exon was spliced by itself onto LF1 and given the name D8. These constitute two previously unknown isoforms.

In terms of genomic structure, the D7 exons extend the known 5' end of PDE4D over 590,000 bp and the D8 exon lies between two previously recognized exons. The D7 isoform has an open reading frame extending into LF1, resulting in an additional 90 amino acids at the N-terminus of the predicted protein. The D8 5' exon contains a long 5' UTR, followed by an ATG near the end of the exon that extends an ORF into LF1 and results in a novel 21 N-terminal amino acids in the predicted protein.

Table 11: New Isoforms

Isoform				
Name		Cell line		
Exon		Size		
PDE4D6	D6			
PDE4D7	D7-1	5'	122 bp	SKNAS
PDE4D7	D7-2	Internal	131bp	SKNAS
PDE4D7	D7-3	Internal	230 bp	SKNAS
PDE4D8	D8	5'	782 bp	HeLa

The sequences are as follows:

D7-1:

ATAGTTGGCGTACCCTGAGGCCTGCCAGTTCCTGCCTTAATGCATATGTAGT
CGTAATTGAGTTCTGACACGGCCTTGGATGTTTCTGTCCTAAATAGCTGACA
TTGCATCTTCAAGACTGT

D7-2:

CATTCCAGTTGGCTTTTGAGTGGATACGTGCAGTGAGATCATTGACACTGGA
AACACTAGTTCCCATTTTAATTACTTAAAACACCACGATGAAAAGAAATACC
TGTGATTTGCTTTCTCGGAGCAAAAGT

D7-3:

GCCTCTGAGGAAACACTACATTCCAGTAATGAAGAGGAAGACCCTTTCCGC
GGAATGGAACCCTATCTTGTCCGGAGACTTTCATGTCGCAATATTCAGCTTC
CCCCTCTCGCCTTCAGACAGTTGGAACAAGCTGACTTGAAAAGTGAATCAGA
GAACATTCAACGACCAACCAGCCTCCCCCTGAAGATTCTGCCGCTGATTGCT
ATCACTTCTGCAGAATCCAGTGG (SEQ. ID NO.: 11; includes D7-1, D7-2 and D7-3)

New predicted amino-terminal protein sequence from above (PDE4D7):

· MKRNTCDLLSRSKSASEETLHSSNEEEDPFRGMPEPYLVRRLSCRNIQLPPLAFRQ
LEQADLKSESENIQRPTSLPLKILPLIAITSAESS (90 amino acids) (SEQ ID NO.:12)

D8:

TTCTCACTGCCCTGCGGTGTTTTGAACTGCCTTCTTACAGACGTCATACAGCC
CTTGAGGAATAGTTTCTGCCTGGTGAGATTGAATGATAGTTCTCATTCACAA
AACCTTGGATTCTAAGCAGGGACACACAGAAATTACTTTCGCAGGTAAATC
AGCCCACCCAGCCAAAGTGTGGAGAGATTTGTTCCCTTGGCTGACTTCTTTGC
TCCACGGAGAGGAGTGTTTTCTGTGCTTGCCCTGAAATGGAACCTCCTTGA
CAGCTCTCCCGTGTTACAGTACCTCCCGGTCATTTTCTTTTTCTCTCTCTAC
CTGCGCTCTTCGAGTGTCAGAAACCTTTAAAGCTGTTACTATGGAATTGCAA
AAAAGAGATCAAGTGACTCTTTCCTATGCTGGTTTCCCTTGTGACCCAGAT
GAAGAATCAATTCAGAATTCAGTTCCTCCCTTGGCATTGCAAGACACAGAAG
AAACTGTCACTTCCTAACAGCCTAGTACTGGAGTAAATTCAGTATGAAGGAA
GAAAGCGCTCCTGCGTGTTAGAACCTTGCCCATGAGCTGGACCGAGGACAG
GAGATGGACTCCAGGAAAATTGGATTTCTTCAAGCAGCCTCCCTTGGAAATG
GAATATCTTTAAAATCTTCTTTGCAGAAAGACAGTTAGAATGTATTAATCAG
AATAGTTGAAGACTTATTTTCCTTTTTATTTTTTTTCAAATGAGCATTATTAT
GAAGCCAAGATCCCGATCTACAAGTTCCTAAGGACTGCAGAGGCAGTTTG
(SEQ ID NO.:13)

New predicted amino-terminal protein sequence from above (PDE4D8):

MSIIMKPRSRSTSSLRTAEAV (21 amino acids) (SEQ ID NO.: 14).

Expression analysis

The tissues below were examined by RT-PCR, cloning and sequencing. The presence (Pos.) or absence (-) of the isoforms transcripts is shown in tables below.

Table 12A Original Cell Lines (SKNAS and HeLa)

	D7	D8
HeLa	-	Pos.
SkNAs	Pos.	Pos.

Table 12B Human tissue DNA panels

cDNA panels	D7	D8
Spleen	-	Pos.
Lymph node	Pos.	Pos.
Thymus	Pos.	Pos.
Tonsil	Pos.	Pos.
Leukocytes	Pos.	Pos.
Bone marrow	Pos.	Pos.
Heart	-	Pos.
Brain	-	Pos.
Placenta	Pos.	Pos.
Lung	Pos.	Pos.
Liver	-	Pos.
Skel. muscle	-	Pos.
Kidney	Pos.	Pos.
Pancreas	-	Pos.

Table 12C Human blood cell fractions

	D7	D8
Spleen	Pos.	Pos.
Lymph node	Pos.	Pos.
Thymus	Pos.	Pos.
Tonsil	Pos.	Pos.
Leukocytes	Pos.	-
Bone marrow	Pos.	Pos.
Fetal liver	Pos.	Pos.
Mononucleated cells	Pos.	Pos.
resting		
CD4Pos. resting	-	Pos.
CD8Pos. resting	-	-
CD14Pos. resting	Pos.	Pos.
CD19Pos. resting	Pos.	Pos.
Mononucleated cells	-	-
activated		
CD4Pos. activated	-	-
CD8Pos. activated	-	-
CD19Pos. activated	-	Pos.

Table 12D Cultured in-house endothelial and smooth muscle cells from patients

Cell type	D1	D2	D3	D5	D6	D7	D8
Normal aorta smooth musc.	Pos.	Pos.	Pos.	Pos.	Pos.	-	-
Diseased aorta smooth musc.	Pos.	Pos.	-	Pos.	Pos.	-	Pos.
Diseased aorta smooth musc.	Pos.	Pos.	-	Pos.	Pos.	-	-
Diseased femoral smooth musc.	Pos.	Pos.	-	Pos.	Pos.	-	Pos.
Normal aortic endothelial cells	Pos.	Pos.	Pos.	Pos.	Pos.	Pos.	Pos.
Diseased aortic endothelial cells	Pos.	Pos.	-	Pos.	Pos.	-	-
Diseased femoral endothelial cells	Pos.	Pos.	-	Pos.	Pos.	-/?	-/?

Isoform specific primers were designed in order to better determine the expression of different PDE4D isoforms using RT-PCR on Epstein Barr Virus (EBV) transformed B cell lines from stroke patients and controls. The results are outlined in Tables 13A and 13B below. There is a significant difference between the expression of D3 and D7 in patients compared to controls.

Table 13A RT-PCR on EBV transformed B stroke patient cells

Patient Cells	PDE4D*	D3	D4	D5	D6	D7	D8
P-1	Pos.	Pos.	-	Pos.	-	Pos.	Pos.
P-2	Pos.	Pos.	-	Pos.	-	Pos.	-
P-3	Pos.	-	-	Pos.	-	-	-
P-4	Pos.	Pos.	-	Pos.	-	Pos.	-
P-5	Pos.	Pos.	Pos.	Pos.	-	Pos.	-
P-6	Pos.	-	Pos.	Pos.	-	Pos.	-
P-7	Pos.	Pos.	-	Pos.	-	Pos.	-
P-8	Pos.	-	-	-	-	Pos.	-
P-9	Pos.	-	-	Pos.	-	Pos.	-
P-10	Pos.	-	-	Pos.	Pos.	Pos.	-
P-11	Pos.	-	-	Pos.	-	Pos.	-
P-12	Pos.	-	-	Pos.	-	Pos.	-
P-13	Pos.	-	-	Pos.	-	Pos.	-
P-14	Pos.	-	-	Pos.	-	Pos.	-
% expr.	100	35,7	14,3	92,8	7,1	92,8	7,1

*Primers designed for the common region of PDE4D identical for all isoforms

Table 13B RT-PCR on EBV transformed B control cells

Control	PDE4D	D3	D4	D5	D6	D7	D8
Cells	*						
C-1	Pos.	-	-	Pos.	-	-	Pos.
C-2	Pos.	-	-	Pos.	-	-	-
C-3	Pos.	-	-	Pos.	-	-	-
C-4	Pos.	-	-	Pos.	-	-	-
C-5	Pos.	-	-	-	-	Pos.	-
C-6	Pos.	-	-	-	-	-	-
C-7	-	-	-	Pos.	-	-	Pos.
C-8	Pos.	-	-	-	-	Pos.	-
C-8	Pos.	Pos.	-	Pos.	-	Pos.	-
C-9	Pos.	-	-	-	-	Pos.	-
C-10	Pos.	-	-	Pos.	-	Pos.	-
C-11	Pos.	-	-	Pos.	-	Pos.	-
C-12	Pos.	-	-	Pos.	-	-	-
% expr.	92,3	7,7 ^a	0	69,2	0	46,2 ^b	15,4

^a $p < 0.09$ using Fisher's Exact Test.

^b $p = 0.01$ using Fisher's Exact Test

*Primers designed for the common region of PDE4D identical for all isoforms

Table 9
Publically Available SNPS; SNP ID No. from NCBI Database

rs286155	rs40512	rs251726	rs2042315	rs1544791	rs1355099
rs286156	rs35386	rs1862589	rs918590	rs851284	rs1396473
rs2061250	rs35387	rs702556	rs918591	rs1396476	rs1369285
rs286150	rs27221	rs702554	rs918592	rs1508860	rs1435071
rs206789	rs27653	rs441391	rs1115372	rs1974850	rs1435070
rs1823062	rs26955	rs446883	rs1345782	rs2136203	rs1435083
rs1823063	rs26956	rs789615	rs1363862	rs2174994	rs991551
rs1445852	rs153031	rs401207	rs1423248	rs1508863	rs1154790
rs766119	rs185190	rs364917	rs1423246	rs1508859	rs1154789
rs956721	rs37762	rs404202	rs1862614	rs1508864	rs714291
rs248910	rs37761	rs440607	rs2194256	rs1396474	rs981760
rs248912	rs1423471	rs411255	rs889305	rs1543951	rs1369288
rs187481	rs27224	rs615429	rs2113071	rs2016324	rs977418
rs153152	rs1645013	rs789396	rs2113072	rs1995780	rs977417
rs27960	rs1423472	rs37684	rs966220	rs1508865	rs977416
rs27564	rs27220	rs1445893	rs966221	rs952110	rs1529843
rs27565	rs1423473	rs37685	rs719702	rs1533019	rs1529842
rs26948	rs149079	rs1086121	rs2113073	rs2117552	rs1435077
rs40131	rs149324	rs42222	rs2113074	rs1545069	rs1369287
rs26949	rs153067	rs37707	rs2113075	rs1545070	rs1017410
rs26950	rs40354	rs37708	rs1035512	rs973700	rs1017409
rs26954	rs26951	rs37709	rs1559277	rs1583434	rs1435076
rs26953	rs153029	rs789389	rs1981848	rs1347401	rs1435075
rs152324	rs27223	rs1423247	rs1544788	rs1949017	rs1435074
rs35385	rs27222	rs874768	rs1544790	rs723962	rs978455

rs1827340	rs159621	rs1504982	rs298084	rs298027	rs295972
rs1393083	rs159625	rs877745	rs298083	rs298028	rs295971
rs988364	rs1435072	rs877744	rs298073	rs298029	rs295970
rs1017408	rs173945	rs2164661	rs298072	rs298030	rs295969
rs2053155	rs256356	rs981230	rs298071	rs169868	rs295968
rs181923	rs185351	rs1437124	rs1421400	rs177077	rs295966
rs1546364	rs256355	rs746477	rs402874	rs298032	rs726652
rs173942	rs2067024	rs893191	rs434368	rs298033	rs295965
rs159616	rs256354	rs1992112	rs371011	rs298034	rs1307218
rs159620	rs173944	rs298102	rs298063	rs298035	rs1307217
rs1501641	rs256353	rs298101	rs298062	rs298042	rs893190
rs159619	rs986400	rs2164660	rs298061	rs298044	rs1111495
rs159614	rs1504981	rs298100	rs298060	rs298045	rs295961
rs159613	rs1120533	rs298098	rs298057	rs298046	rs295960
rs159612	rs256351	rs298096	rs298056	rs298048	rs295959
rs159611	rs190458	rs298095	rs1370230	rs298049	rs295958
rs194368	rs256352	rs298094	rs297975	rs298050	rs296410
rs661576	rs171745	rs298093	rs297974	rs298051	rs295957
rs299627	rs1157709	rs1362942	rs379578	rs298052	rs295956
rs159608	rs1910790	rs1362941	rs920190	rs298053	rs295955
rs159609	rs1910789	rs298091	rs1865962	rs190936	rs295954
rs159624	rs1504985	rs298090	rs298018	rs298017	rs295949
rs1159470	rs1008709	rs298089	rs298021	rs298016	rs295980
rs159622	rs1027747	rs298088	rs298022	rs298015	rs295979
rs256349	rs869685	rs298087	rs298023	rs298014	rs295978
rs256348	rs869686	rs1421401	rs298024	rs2053229	rs1154587
rs1501640	rs924880	rs298086	rs298025	rs295974	rs296406
rs600611	rs1504983	rs298085	rs298026	rs295973	rs296405

rs295948	rs294478	rs37575	rs1457111	rs171800	rs403695
rs295947	rs953302	rs37576	rs1824154	rs187716	rs403672
rs295946	rs294479	rs1876209	rs2112911	rs258110	rs372309
rs295945	rs697075	rs190486	rs1551564	rs258109	rs424839
rs295944	rs294481	rs447261	rs2034895	rs258108	rs370891
rs1395334	rs294482	rs1506558	rs2081092	rs258107	rs434183
rs295943	rs294483	rs1108916	rs2112910	rs665836	rs444552
rs1035321	rs702545	rs921942	rs918583	rs392901	rs433565
rs294494	rs294484	rs924998	rs1840838	rs383444	rs1445918
rs722923	rs294485	rs176705	rs1350298	rs662643	rs441817
rs294495	rs294486	rs1156029	rs1990985	rs670169	rs433161
rs294496	rs702544	rs1156028	rs1379297	rs525099	rs428059
rs294497	rs702543	rs931857	rs1817248	rs669240	rs434422
rs294498	rs159194	rs931856	rs244569	rs381755	rs427433
rs294499	rs40215	rs931855	rs244568	rs454702	rs391377
rs294500	rs291118	rs1506557	rs244567	rs443191	rs414746
rs294501	rs1506560	rs462930	rs244565	rs380118	rs187368
rs294503	rs37569	rs458953	rs185417	rs2168649	rs244593
rs295936	rs291119	rs174039	rs258128	rs371775	rs244592
rs1395336	rs37571	rs2174624	rs258127	rs378970	rs244591
rs1395337	rs1870077	rs2135480	rs258125	rs401013	rs244590
rs294492	rs159195	rs992726	rs1348710	rs427748	rs181736
rs159196	rs37572	rs294474	rs1348709	rs427740	rs193447
rs159197	rs37573	rs294475	rs1971061	rs378869	rs2028842
rs172362	rs167161	rs988827	rs1541673	rs1902609	rs2028841
rs37579	rs37574	rs988828	rs1541672	rs389324	rs1823068
rs721784	rs1506562	rs1350297	rs258112	rs387647	rs1823067
rs697076	rs291122	rs1457110	rs258111	rs377451	rs1823066

rs1077978	rs1353749	rs2055295
rs2081106	rs1391651	rs1391648
rs1559252	rs1391650	rs2055298
rs2054443	rs1391649	rs1472456
rs922437	rs1391652	rs1553114
rs922436	rs950446	rs1542842
rs922435	rs950447	rs1498611
rs922434	rs1498599	rs1532520
rs716908	rs1498601	
rs1971940	rs1498609	
rs1559251	rs1498608	
rs1345791	rs1553113	
rs1345792	rs1353748	
rs1345793	rs1498606	
rs1105577	rs1353747	
rs1960	rs1006431	
rs1824788	rs1948651	
rs1862563	rs1498605	
rs1551939	rs1498604	
rs1038080	rs1498603	
rs997421	rs1995166	
rs1014317	rs1498602	
rs2059191	rs1077183	
rs1551938	rs1078368	
rs1186170	rs1874857	
rs986067	rs1874858	
rs954740	rs1909294	
rs1363882	rs1546221	

Table 10
New SNP's identified by deCODE

Position in patent	Variation	AA Change	Exon		
				1268007	A/G
732790	G/T			1268187	C/T
735966	C/A			1268553	A/G
736226	A/G			1272669	G/A
736516	C/T			1272910	A/G
850001	G/A			1273023	G/A
852776	A/C			1273220	A/G
853079	G/T			1273240	A/G
853575	C/A			1273543	C/T
856468	A/G			1288439	G/A
860845	A/G			1289730	T/A
870924	A/G			1290176	G/A
1027267	T/C			1293745	T/C
1027643	T/G			1344605	A/G
1027757	T/C			1344864	G/A
1028146	T/A			1345135	C/G
1037657	A/C			1345286	A/G
1044016	G/A			1346112	C/T
1044045	C/T			1352976	A/T
1254737	T/C			1354291	T/C
1254849	T/C			1354377	C/T
1255763	G/T			1354554	C/A
1257206	A/G			1354675	T/C
1258161	T/C			1355114	T/C

1355693	A/G	1575634	A/T		
1357081	A/G	1580088	G/A		
1362985	T/G	1581078	G/A		
1363021	C/T	1582418	T/A		
1363827	C/T	1584580	A/C		
1363911	G/A	1585955	G/T		
1364061	C/T	1590608	T/C		
1364066	T/A	1590672	A/G		
1367904	A/G	1590673	G/T		
1368193	T/C	1590837	G/A		
1368217	G/C	1590936	C/A		
1373349	C/T	1591011	G/A		
1373384	A/G	1591047	C/T		
1373415	T/C	1591306	C/A	Pro->Thr	D1
1373979	T/G	1591583	T/C		
1376149	G/A	1594788	C/A		
1384931	A/C	1594994	G/A		
1385093	A/T	1601831	C/T		
1385107	G/A	1636902	T/C		
1385445	T/C	1638550	A/C	Lys->Thr	exon 4
1391418	G/C	1640663	T/C		
1409210	C/A	1641954	C/T		
1414804	C/T	1641960	C/T		
1428284	T/C	1653881	G/A		
1431800	A/T	1655748	G/A		
1449904	A/T				
1574301	C/G				
1574615	C/T				

While this invention has been particularly shown and described with reference to preferred embodiments thereof, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the spirit and scope of the invention as defined by the appended claims.

CLAIMS

What is claimed is:

1. An isolated nucleic acid molecule comprising a phosphodiesterase 4D gene, or a fragment or variant thereof.
- 5 2. The isolated nucleic acid molecule of Claim 1, wherein the phosphodiesterase 4D gene has the nucleotide sequence of SEQ ID NO:1 which may optionally comprise at least one polymorphism as shown in Table 9, 10 or combination thereof.
- 10 3. A nucleic acid encoding a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NOs: 2-10, 12 or 14.
4. An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Table 9, 10 or combination thereof, and the complement thereof.
- 15 5. An isolated nucleic acid molecule which hybridizes under high stringency conditions to a nucleotide sequence selected from the group consisting of SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Table 9, 10 or combination thereof, and the complement thereof.

6. An isolated nucleic acid molecule which hybridizes under high stringency conditions to a nucleotide sequence encoding an amino acid sequence selected from the group consisting of: SEQ ID NOs: 2-10, 12 or 14.
7. A method for assaying the presence of a first nucleic acid molecule in a sample, comprising contacting said sample with a second nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Table 9, 10 or combination thereof, and the complement thereof, under high stringency conditions.
8. A vector comprising an isolated nucleic acid molecule selected from the group consisting of: SEQ ID NO: 1, the complement of SEQ ID NO: 1 SEQ ID NOs: 2-10, 12 or 14, operatively linked to a regulatory sequence; wherein the nucleic acid molecule may optionally comprise at least one polymorphism as shown in Table 9, 10 or combination thereof.
9. A recombinant host cell comprising the vector of Claim 8.
10. A method for producing a polypeptide encoded by an isolated nucleic acid molecule, comprising culturing the recombinant host cell of Claim 9 under conditions suitable for expression of said nucleic acid molecule.
11. An isolated polypeptide encoded by a phosphodiesterase 4D gene, or a fragment or variant of said polypeptide.
12. The isolated polypeptide of Claim 11, wherein the phosphodiesterase 4D gene has the sequence of SEQ ID NO: 1 which may optionally comprise at least one

polymorphism as shown in Table 9, 10 or combination thereof, or the complement thereof.

13. The isolated polypeptide of Claim 11, wherein the polypeptide has an amino acid sequence selected from the group consisting of SEQ ID NOs: 2-10, 12 or 14.
14. An isolated polypeptide comprising an amino acid sequence which is greater than about 90 percent identical to an amino acid sequence selected from the group consisting of SEQ ID NOs: 2-10, 12 or 14.
15. A fusion protein comprising an isolated polypeptide of Claim 11.
16. An antibody, or an antigen-binding fragment thereof, which selectively binds to a polypeptide of Claim 11.
17. An antibody, or an antigen-binding fragment thereof, which selectively binds to an amino acid sequence selected from the group consisting of SEQ ID NOs: 2-10, 12 or 14, or to a fragment or variant of said amino acid sequence.
18. A method for assaying the presence of a polypeptide encoded by an isolated nucleic acid molecule according to Claim 1 in a sample, comprising contacting said sample with an antibody which specifically binds to the encoded polypeptide.
19. A method of diagnosing a susceptibility to stroke in an individual, comprising detecting a polymorphism in phosphodiesterase 4D gene, wherein the presence of the polymorphism in the gene is indicative of a susceptibility to stroke.

20. A method of diagnosing a susceptibility to stroke, comprising detecting an alteration in the expression or composition of a polypeptide encoded by phosphodiesterase 4D gene in a test sample, in comparison with the expression or composition of a polypeptide encoded by phosphodiesterase 4D gene in a control sample, wherein the presence of an alteration in expression or composition of the polypeptide in the test sample is indicative of a susceptibility to stroke.
21. The method of Claim 20, wherein the alteration in the expression or composition of a polypeptide encoded by phosphodiesterase 4D gene comprises expression of a splicing variant polypeptide in a test sample that differs from a splicing variant polypeptide expressed in a control sample.
22. A method of identifying an agent which alters activity of a polypeptide of Claim 11, comprising:
- a) contacting the polypeptide or a derivative or fragment thereof, with an agent to be tested;
 - b) assessing the level of activity of the polypeptide or derivative or fragment thereof; and
 - c) comparing the level of activity with a level of activity of the polypeptide or active derivative or fragment thereof in the absence of the agent,
- wherein if the level of activity of the polypeptide or derivative or fragment thereof in the presence of the agent differs, by an amount that is statistically significant, from the level in the absence of the agent, then the agent is an agent that alters activity of the polypeptide.

23. An agent which alters activity of a polypeptide encoded by phosphodiesterase 4D gene, identifiable according to the method of Claim 22.
24. An agent which alters activity of a polypeptide encoded by phosphodiesterase 4D gene, wherein the agent is selected from the group consisting of: a
5 phosphodiesterase 4D gene receptor; a phosphodiesterase 4D gene binding agent; a peptidomimetic; a fusion protein; a prodrug; an antibody; and a ribozyme.
25. A method of altering activity of a polypeptide encoded by phosphodiesterase 4D gene, comprising contacting the polypeptide with an agent of Claim 24.
- 10 26. A method of identifying an agent which alters interaction of the polypeptide of Claim 11 with a phosphodiesterase 4D gene binding agent, comprising:
- a) contacting the polypeptide or a derivative or fragment thereof, the binding agent and with an agent to be tested;
 - b) assessing the interaction of the polypeptide or derivative or
15 fragment thereof with the binding agent; and
 - c) comparing the level of interaction with a level of interaction of the polypeptide or derivative or fragment thereof with the binding agent in the absence of the agent,
- 20 wherein if the level of interaction of the polypeptide or derivative or fragment thereof in the presence of the agent differs, by an amount that is statistically significant, from the level of interaction in the absence of the agent, then the agent is an agent that alters interaction of the polypeptide with the binding agent.
27. An agent which alters interaction of a phosphodiesterase 4D gene polypeptide
25 with a phosphodiesterase 4D gene binding agent, identifiable according to the method of Claim 26.

28. An agent which alters interaction of a phosphodiesterase 4D gene polypeptide with a first phosphodiesterase 4D gene binding agent, selected from the group consisting of: a phosphodiesterase 4D gene receptor; a second phosphodiesterase 4D gene binding agent; a peptidomimetic; a fusion protein; a
5 prodrug; an antibody; and a ribozyme.
29. A method of altering interaction of a phosphodiesterase 4D gene polypeptide with a phosphodiesterase 4D gene binding agent, comprising contacting the phosphodiesterase 4D gene polypeptide and/or the phosphodiesterase 4D gene binding agent with an agent of Claim 28.
- 10 30. A method of identifying an agent which alters expression of phosphodiesterase 4D gene, comprising the steps of:
- a) contacting a solution containing a nucleic acid of Claim 1 or a derivative or fragment thereof with an agent to be tested;
 - 15 b) assessing the level of expression of the nucleic acid, derivative or fragment; and
 - c) comparing the level of expression with a level of expression of the nucleic acid, derivative or fragment in the absence of the agent,
- 20 wherein if the level of expression of the nucleotide, derivative or fragment in the presence of the agent differs, by an amount that is statistically significant, from the expression in the absence of the agent, then the agent is an agent that alters expression of phosphodiesterase 4D gene.
31. An agent which alters expression of phosphodiesterase 4D gene, identifiable according to the method of Claim 30.
- 25 32. A method of identifying an agent which alters expression of phosphodiesterase 4D gene, comprising the steps of:

- a) contacting a solution containing a nucleic acid comprising the promoter region of phosphodiesterase 4D gene operably linked to a reporter gene, with an agent to be tested;
- b) assessing the level of expression of the reporter gene; and
- 5 c) comparing the level of expression with a level of expression of the reporter gene in the absence of the agent,
- wherein if the level of expression of the reporter gene in the presence of the agent differs, by an amount that is statistically significant, from the level of expression in the absence of the agent, then the agent is an agent that alters
- 10 expression of phosphodiesterase 4D gene.

33. An agent which alters expression of phosphodiesterase 4D gene, identifiable according to the method of Claim 32.

34. A method of identifying an agent which alters expression of phosphodiesterase 4D gene, comprising the steps of:

- 15 a) contacting a solution containing a nucleic acid of Claim 1 or a derivative or fragment thereof with an agent to be tested;
- b) assessing expression of the nucleic acid, derivative or fragment; and
- 20 c) comparing expression with expression of the nucleic acid, derivative or fragment in the absence of the agent,
- wherein if expression of the nucleotide, derivative or fragment in the presence of the agent differs, by an amount that is statistically significant, from the expression in the absence of the agent, then the agent is an agent that alters
- 25 expression of phosphodiesterase 4D gene.

35. The method of Claim 34, wherein the expression of the nucleotide, derivative or fragment in the presence of the agent comprises expression of one or more

splicing variant(s) that differ in kind or in quantity from the expression of one or more splicing variant(s) the absence of the agent.

36. An agent which alters expression of phosphodiesterase 4D gene, identifiable according to the method of Claim 34.
- 5 37. An agent which alters expression of phosphodiesterase 4D gene, selected from the group consisting of: antisense nucleic acid to phosphodiesterase 4D gene; a phosphodiesterase 4D gene polypeptide; a phosphodiesterase 4D gene receptor; a phosphodiesterase 4D gene binding agent; a peptidomimetic; a fusion protein; a prodrug thereof; an antibody; and a ribozyme.
- 10 38. A method of altering expression of phosphodiesterase 4D gene, comprising contacting a cell containing phosphodiesterase 4D gene with an agent of Claim 37.
- 15 39. A method of identifying a polypeptide which interacts with a phosphodiesterase 4D gene polypeptide, comprising employing a two yeast hybrid system using a first vector which comprises a nucleic acid encoding a DNA binding domain and a phosphodiesterase 4D gene polypeptide, splicing variant, or fragment or derivative thereof, and a second vector which comprises a nucleic acid encoding a transcription activation domain and a nucleic acid encoding a test polypeptide, wherein if transcriptional activation occurs in the two yeast hybrid system, the
- 20 test polypeptide is a polypeptide which interacts with a phosphodiesterase 4D polypeptide.
40. A phosphodiesterase 4D gene therapeutic agent selected from the group consisting of: a phosphodiesterase 4D gene or fragment or derivative thereof; a polypeptide encoded by phosphodiesterase 4D gene; a phosphodiesterase 4D gene receptor; a phosphodiesterase 4D gene binding agent; a peptidomimetic; a
- 25

fusion protein; a prodrug; an antibody; an agent that alters phosphodiesterase 4D gene expression; an agent that alters activity of a polypeptide encoded by phosphodiesterase 4D gene; an agent that alters posttranscriptional processing of a polypeptide encoded by phosphodiesterase 4D gene; an agent that alters
5 interaction of a phosphodiesterase 4D gene with a phosphodiesterase 4D gene binding agent; an agent that alters transcription of splicing variants encoded by phosphodiesterase 4D gene; and a ribozyme.

41. A pharmaceutical composition comprising a phosphodiesterase 4D gene therapeutic agent of Claim 40.
- 10 42. The pharmaceutical composition of Claim 41, wherein the phosphodiesterase 4D gene therapeutic agent is an isolated nucleic acid molecule comprising a phosphodiesterase 4D gene or fragment or derivative thereof.
43. The pharmaceutical composition of Claim 41, wherein the phosphodiesterase 4D gene therapeutic agent is a polypeptide encoded by the phosphodiesterase
15 4D gene.
44. A method of treating stroke in an individual, comprising administering a phosphodiesterase 4D gene therapeutic agent to the individual, in a therapeutically effective amount.
45. The method of Claim 44, wherein the phosphodiesterase 4D gene therapeutic
20 agent is a phosphodiesterase 4D gene agonist.
46. The method of Claim 45 wherein the phosphodiesterase 4D gene therapeutic agent is a phosphodiesterase 4D gene antagonist.

47. A transgenic animal comprising a nucleic acid selected from the group consisting of: an exogenous phosphodiesterase 4D gene and a nucleic acid encoding a phosphodiesterase 4D gene polypeptide.
48. A method for assaying a sample for the presence of a phosphodiesterase 4D gene nucleic acid, comprising:
- 5 a) contacting said sample with a nucleic acid comprising a contiguous nucleotide sequence which is at least partially complementary to a part of the sequence of said phosphodiesterase 4D gene nucleic acid under conditions appropriate for hybridization, and
- 10 b) assessing whether hybridization has occurred between a phosphodiesterase 4D gene nucleic acid and said nucleic acid comprising a contiguous nucleotide sequence which is at least partially complementary to a part of the sequence of said phosphodiesterase 4D gene nucleic acid.
- 15 49. The method of Claim 48, wherein said nucleic acid comprising a contiguous nucleotide sequence is completely complementary to a part of the sequence of said phosphodiesterase 4D gene nucleic acid.
50. The method of Claim 48, comprising amplification of at least part of said phosphodiesterase 4D gene nucleic acid.
- 20 51. The method of Claim 48, wherein said contiguous nucleotide sequence is 100 or fewer nucleotides in length and is either: a) at least 80% identical to a contiguous sequence of nucleotides in SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Table 9, 10 or combination thereof; b) at least 80% identical to the complement of a contiguous sequence of
- 25 nucleotides in SEQ ID NO: 1 which may optionally comprise at least one

polymorphism as shown in Table 9, 10 or combination thereof; or c) capable of selectively hybridizing to said phosphodiesterase 4D gene nucleic acid.

52. A reagent for assaying a sample for the presence of a phosphodiesterase 4D gene nucleic acid, said reagent comprising a nucleic acid comprising a
5 contiguous nucleotide sequence which is at least partially complementary to a part of the nucleotide sequence of said phosphodiesterase 4D gene nucleic acid.
53. The reagent of Claim 52, wherein the nucleic acid comprises a contiguous nucleotide sequence which is completely complementary to a part of the nucleotide sequence of said phosphodiesterase 4D gene nucleic acid.
- 10 54. A reagent kit for assaying a sample for the presence of a phosphodiesterase 4D gene nucleic acid, comprising in separate containers:
- a) one or more labeled nucleic acids comprising a contiguous
nucleotide sequence which is at least partially complementary to a
part of the nucleotide sequence of said phosphodiesterase 4D gene
15 nucleic acid, and
- b) reagents for detection of said label.
55. The reagent kit of Claim 54, wherein the labeled nucleic acid comprises a contiguous nucleotide sequences which is completely complementary to a part of the nucleotide sequence of said phosphodiesterase 4D gene nucleic acid.
- 20 56. A reagent kit for assaying a sample for the presence of a phosphodiesterase 4D gene nucleic acid, comprising one or more nucleic acids comprising a contiguous nucleotide sequence which is at least partially complementary to a part of the nucleotide sequence of said phosphodiesterase 4D gene nucleic acid, and which is capable of acting as a primer for said phosphodiesterase 4D gene
25 nucleic acid when maintained under conditions for primer extension.

57. The use of a nucleic acid which is 100 or fewer nucleotides in length and which is either: a) at least 80% identical to a contiguous sequence of nucleotides in SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Table 9, 10 or combination thereof; b) at least 80% identical to the complement of a contiguous sequence of nucleotides in SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Table 9, 10 or combination thereof; or c) capable of selectively hybridizing to said phosphodiesterase 4D gene nucleic acid, for assaying a sample for the presence of a phosphodiesterase 4D gene nucleic acid.
58. The use of a nucleic acid which is 100 or fewer nucleotides in length and which is either: a) at least 80% identical to a contiguous sequence of nucleotides in SEQ ID NO: 1; b) at least 80% identical to the complement of a contiguous sequence of nucleotides in SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Table 9, 10 or combination thereof; or c) capable of selectively hybridizing to said phosphodiesterase 4D gene nucleic acid, for assaying a sample for the presence of a phosphodiesterase 4D gene nucleic acid that has at least one nucleotide difference from SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Table 9, 10 or combination thereof.
59. The use of a nucleic acid which is 100 or fewer nucleotides in length and which is either: a) at least 80% identical to a contiguous sequence of nucleotides in SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Table 9, 10 or combination thereof; b) at least 80% identical to the complement of a contiguous sequence of nucleotides in SEQ ID NO: 1 which may optionally comprise at least one polymorphism as shown in Table 9, 10 or combination thereof; or c) capable of selectively hybridizing to said phosphodiesterase 4D gene nucleic acid, for diagnosing a susceptibility to stroke.

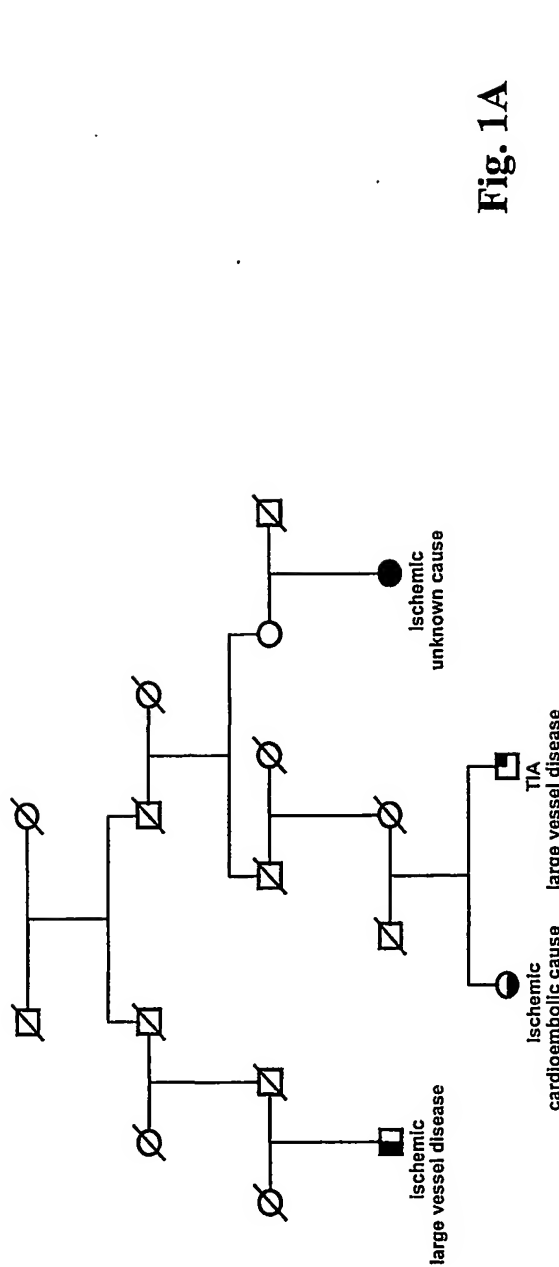


Fig. 1A

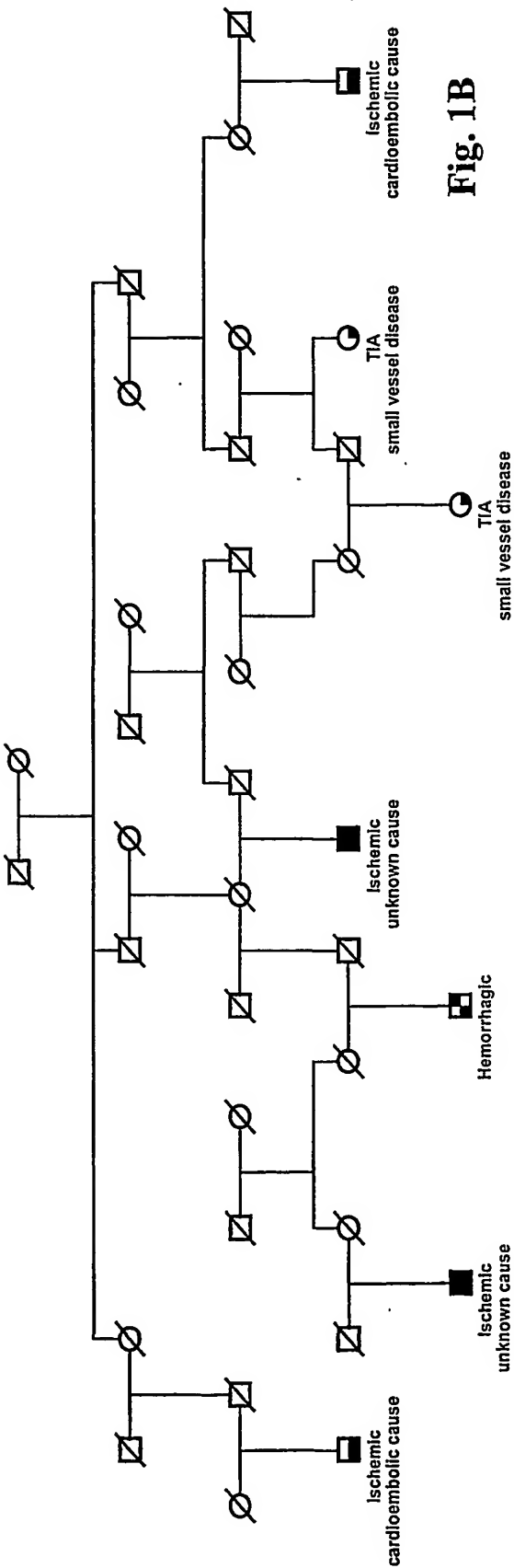


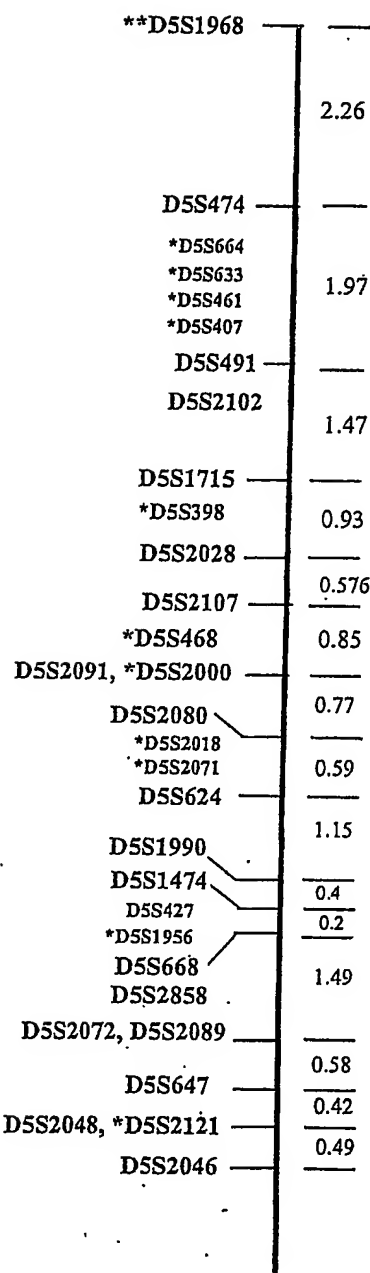
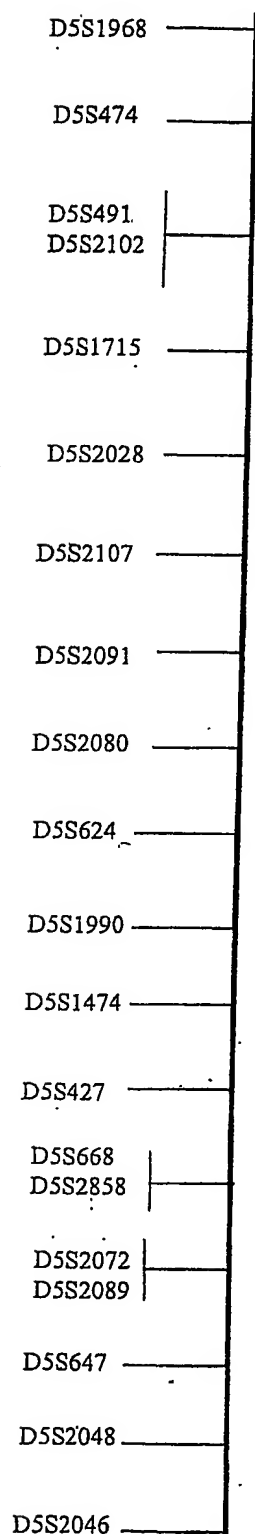
Fig. 1B

2/375

Genetic map

Combined map - cM

Physical map - Mb



*Markers only assigned in physical map
 **Marker in blue - only assigned in genetic map

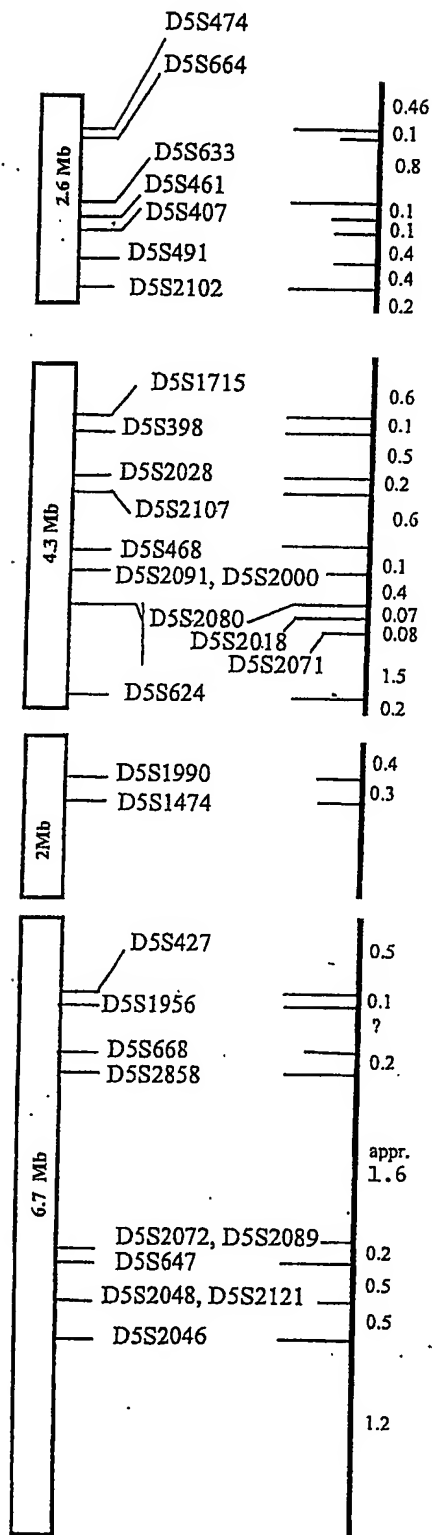


Fig. 2A

Fig. 2B

Fig. 2C

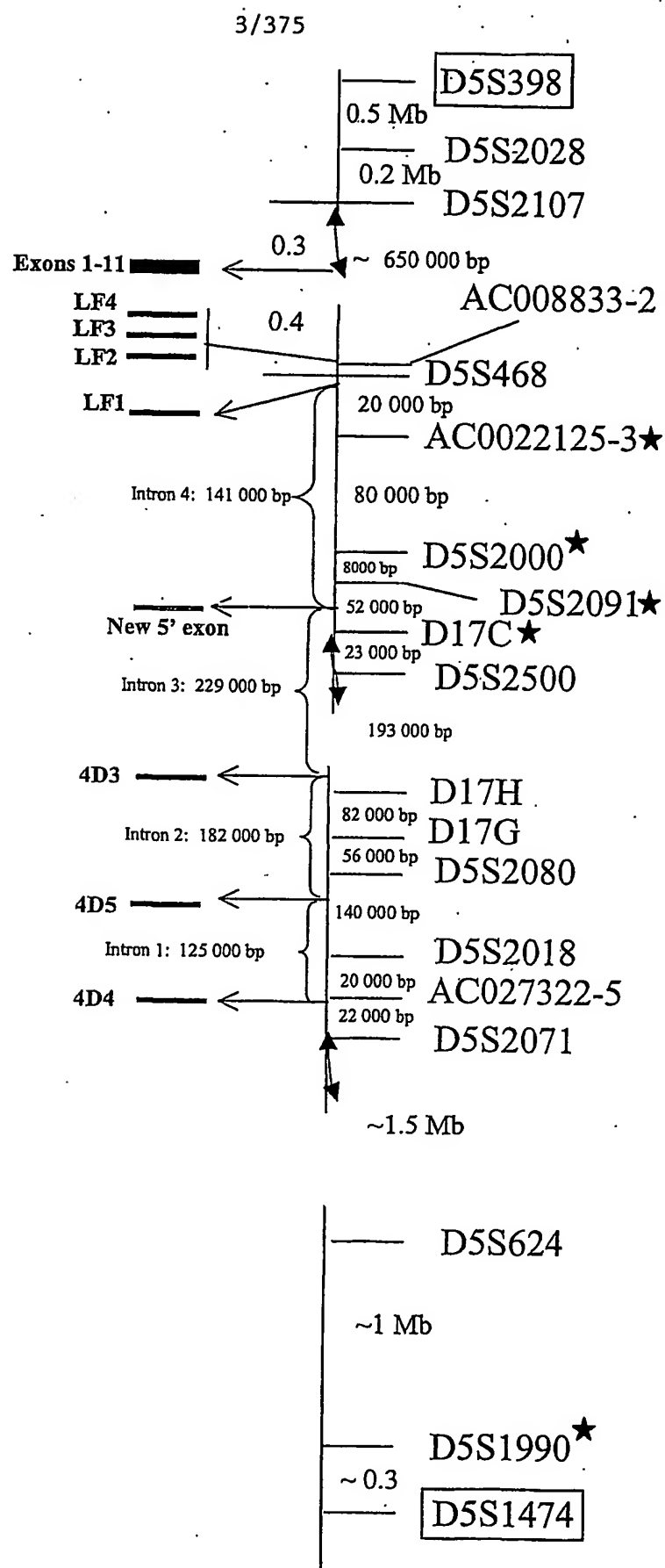


Fig. 3

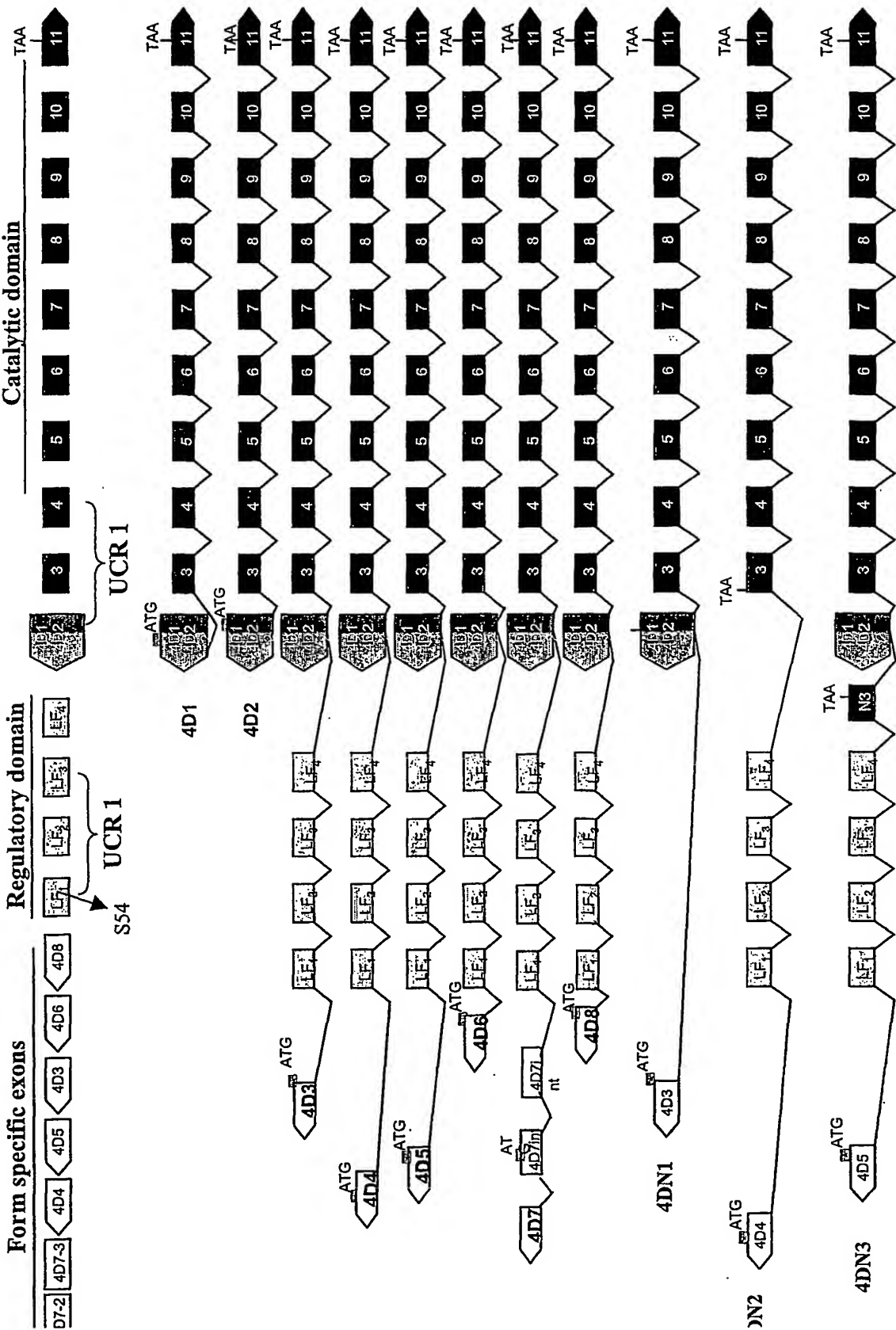
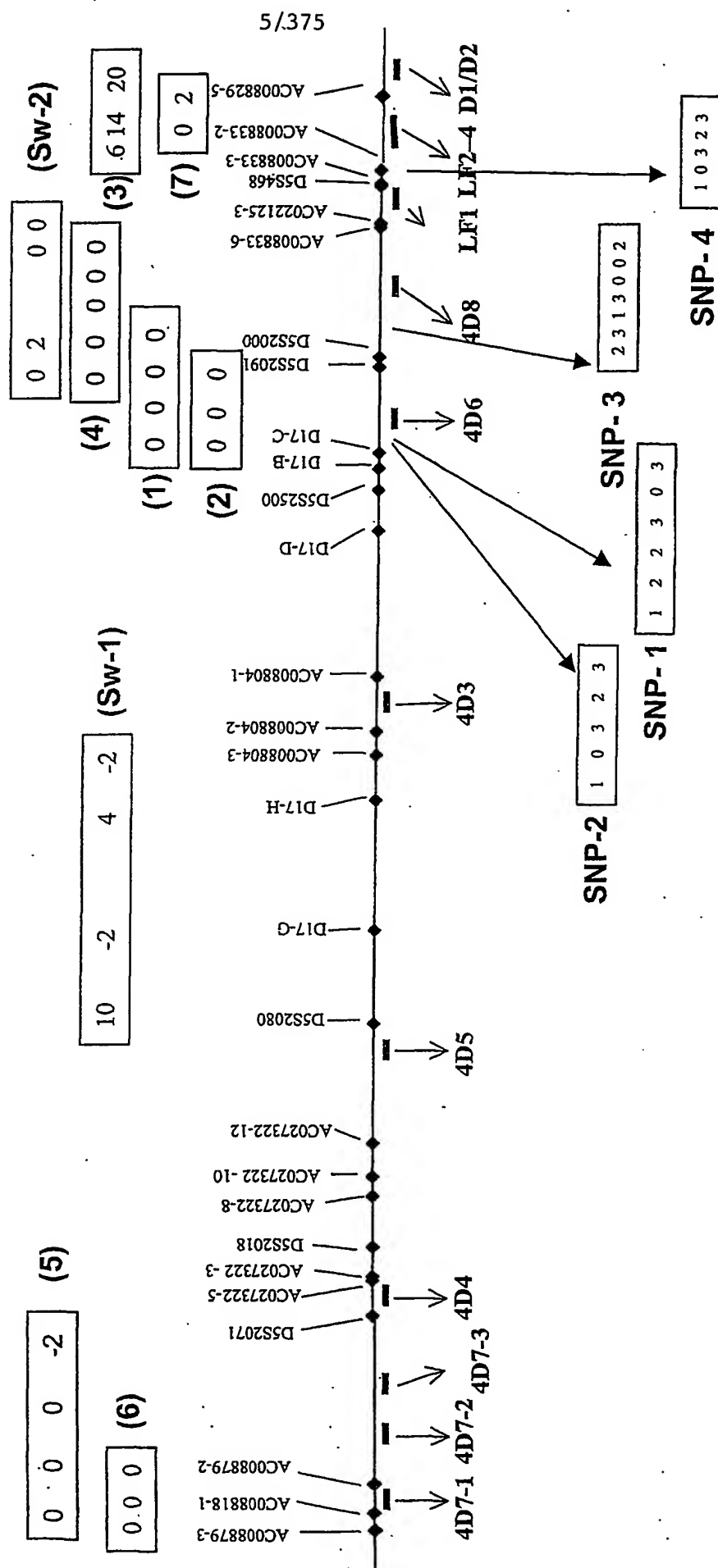


Fig. 4

Position of selected haplotypes within gene

microsatellite haplotypes



SNP haplotypes

Fig. 5

6/375

>Contig_2 (1,1691140)

CATTTTTTTGAAAGAACATCTGAAAGACAAAATGGGGAATGGCGAGTCTGTCTAATAAACCATTTTTGAGAAAACCTGGATA
TTCATATAAAGAAGTATAAAGAGGACTGTTATGTTGCACAATACACAAAATCAACTCAAATAAATTAATGACCTAAA
CTTAATATCAGAAATGATGAAACTTTTAAAAGAAAACATAGGGTGAATGTATGTTTAGGGAAACTCAAATTTATGTTCA
CAGGTTGCAAAAAGAAAAATATGAGAAAAACATAGAGGAAAATGATTCTGCCAATAAAGTGAGTTGGAAATAATTTTTTC
TGTTTTTCACAAAATCATTGCTAACAAAAGCAAAAACAAGTGTGGGACTATAGAAAACCTGATGAGCTTCTGCATAGGAA
AGAAAAGAATGAACCAATACAGAAGGCATCCAGTAGATTGGGACAAAATTTATGGGGGATTATATATCTGAAAGGGTTGT
TATCTAACATGTATAAGAAATTACCACTACTAAGTAGGAAAAACAACAACACAAAACAACAAATAACCAGATGGAAATT
GGGCAAGAACCTGAATAGATGTTTCTGAATAGAAGACATGAATTTGACTACCAGGTAAAAGAAAAGGTTCTCAACATA
CCTAATCATCAAGAAAATGTACATTAAAACTCACTGAGATATCTTCTCCACTCTAATTGGAATTAATGTTACAAAAAG
AAACAAATTTTTTACAATGAAATGATCAGTGTGGAGTTGGATGAAGGGGTACTATTACACTACTACACAGTGTAGGGTG
GAATTTAAGTCAGTATACACACTATGAAAAATAGTTGGAGTTTGCTCAAAAAATAAAATACAACATCATTGTCTGTAG
TAATCCCAGCAGTGAATATACATTTTAAGAAAAAGAAATCAGTATATTGAAGAGATACGTGAAATCCTACATTTCTTGA
CACATTATTCACAGCACTCAAGATGTGGAATCAACCTACCTGTCCAGGAACAGATGAAGAGATAAAGAAAATGCGATGT
GTATACACAGTGGAAATGCTCTTCCACATAAAAAATTCACGGAATCATGTCAATTGCAGCAACATGGTGGACAAATGTAAGA
AAAGCTCCCCGGAGAAGCTGTACAGAAGCTGCCTCCTCAGCAGTCAGGGCCAGGGACCGGAGCTGTTTTTACCCAGGA
CAGGGCCGGCCCCAAGTCATCCAGAGCTGCCATGGCACCCCCCTCAGTCGGGTCTTGAGGAATCCTACACAAGCTACTT
ATATCAGTGATCACTAGGATAATCCATAGAACTTTTGGGAAAGAAGTTTAAAGACCTTTCTCCCACCATTTTCAGCAGGAT
AAATCCAACCTGGATTAGAAAATGAAATGTTAATAATGCAATAAGTACATATTTATATCTGTATATAAAATACAGTTG
ATATTTGCCCTGGTGTTTAGGTGTCTAAAGGACTTTCTAAGCATAAAAGCAAAAAAAGTCATAAAAATGCTATAGCAGT
TTGAGACTCTATGCAGGAAAGGGCATCATCAGTGCATGGATGAATCTGTATCTAATTTTAAACAATTTCCAATGGTGC
CTGTTTCTCTTTCTTTGAAAATCTCTGGAGAAATAGTTCCTCTTGCTGTGTCTTTCTTTAGGCAAGAATTTTTACTAAT
TGATGTGTAGTCTGAATCCTGGCTAAGTATAAACCTTTTATTTTTTATACCTGTTCTTAGTGAAAATGAAACTGTGACT
TTTTTTTTAATTCCTTTTGTGGTCAAAAACCTTCAATTAACCTCTTCTGAGTTTCTTCTCTGGCTGAACAAACAATGGTC
CCATTGGCCTTTTCAGGGAACCTCAGGCCGTCTCAAAAACCTTCATGTTTCATTTCTTTTCAGAGCTCCCAAAAAGAATA
GCTTGCTCTTGACGTTGTACATGTTAGTGAATGATCAGGACTACTTTGCAAAGATGAAAAATTTGTGTTTCTAGTGAT
TTGAAAATAGAAATCTGATGTAACTATTAGATATTGGGAAAGAAGGTGACGAAGGTAGGTATCACCGAAAGCACTTAAC
AATTCGAATAAATCTGTACTTGATTGCATTTATGTGTATCATAGGAACAGTTGGGTTTCTTGAGTGTTAAATTATTT
ATTCATCTATTCCACTTCAAGCCAGCTAAATGATGTTTCCCTGATGGCAAAAGTCTCAGATTGATTGCACAGTTTATT
TGGTTGGATTGTTTATGCTCTTTTATTATTATTCTTATTTCACCAATGAAAATATCACTAAGTCTTTTGGTTGTG
ACCTGATTGTACCTACTTTGACAAATCACTGCCTTTCTGGACCCAGTTTCTCATTAAAGTGGCAGTGATAACCTGTGCAT
ACTTACAGATATAAAAACATGAAAGTTAAAGTATTGGGTAATACTTTCTCTCTATCTTTTTTTTATTCTTGAAAAAGATA
AAAAATTGGCATAATGTATTAGTTAAGATGGAATAATCATATGTTGATATCCAGCCATTTCTTCTCTCAAATGATAGGA
AGATTTTTTATGTGAAACTACTTGTGAGAGATCTTAACAATTTGTAGTTAGAGAAAGCACTATTATATCATTTGGAAATG
CAAGAAACAAGTTACCTTTGGGGCAACAGAGGCCCTTGTCAATTTCTCAAAGAAGGAAGCATCAGCATTTTGTATGATG
ATGTTGAGATTGTAGAAATGATGAAGGTGAAAAAGTTATTCTAGCTTATGTTTAGCAAAATGAAATGAACCCAAATAAT
AAAACAGTTACAACATTGAATCTCTTTGGGAGAAAAAAGATAGAATGCTAATGTCTTCAGAACTTCTTAAACCA
GAACCTTAAAAAAGAGAAGCTTTTAAAAAATCATAATAGTTTATGATCTTGAAGGGTTTAAAGTATTGATGAAGA
TGCTTTTTGAATTTATTTGTAGGTCTTCTTGTGTATTTAAAGCTAAGTTATCTTGTAAATCATTTTTTTCTATACCTTT
GTCAGTAACCTCTTAGTGATGAAATAAAAAAGATTAGGTAATCATCCAGCAATGGGGAAAGAGTTAAGGAACAAAGAGC
TCAGATTAACTAGTTTTTAGAATCTAAGCATTCTGTCATGAATTTGAATCATGGAAAACAAAATGTAGCACTCCAACA
TTTGATGCAAACTAAAAGTGAATACTGCTTTGATATTTGAATGAATTGAAAAATAATTAACATCCTTGGAACGTGTAT
GTAAAGAAGGACTTCACAAGTATTATAGATACCCCCAACCTCAGCCCTTTCCCATGTATCTCTTTGATCACATCCCTA
CCTCATAGATCACCCATGTGCTGAAGACTTTCAGTTCTGTATCTTCATTCTAGATCTCCTGAACTCAAGATCAGAATAT
CTTCTGACTTCTGACTGTGTATTTCTGGATGTTATACAAGAACCTCAGCTCAAACCTCAGTATTCCTTAAACCATTGTT
TTTGAACCTTTATGTTGGATGTGAAATCTGTATTTGTAGAATAACATTAATAAAGAAAGAAATAGTATGCAAAATATCAG
AGTGCATTGTATGTAGCAAGAGTAGGTATTTTCGTAAACTTTTTGTTTTTAATTAAACACATATATATTATTATGTCAG
TGTAATATGATTTCTTAATTTGGATAAGTGTTAGTGAGGATGTGGATAAATTGGAACCTTGTACATTACTGGTGGGA
CTATAAATGGCACTGCCGTTTGGTAAAAACAGTTTGGCAGTTCCTCAAAAAGTTAAACATACAGTTAACATGTGATATA
GAAATTTCACTTTTAGATGTACACCCAAAAGAATTGAGAACATATGTTACACAGCAACTTGTACACAAATGTTTCATAG
CAGCATTACTCAGAAGAGCCAAAAGTGGAAACAACCTGAAATGTCCATCAAGTGATGAAGCAGTAAATGTAGTATATC
CGTACAATGAAATATTCAGCCATAAAAAGGAATGCAATGTTGTTGCATGCTACAACAACCTGGATGAATCTTGGAACA
TTATTCTAAGTAAAAGATTCCATTTTTATGAAATGTCCAGAATAGGCAATCTATAGAGACAAAGATAAGTGGTTTCCA
GGGGTTGTGGGGAGGAGAGAATGGGAAGGTGACAAAATGTTCTGGATTAGATAATAGGGATGGGTATAACTTAGTGACT
ATACAAAAAATCACTAGAATCATATACTTTAAAAAAGATATTTCCCATAAAAAAGAACAAAGCAAGAAAAATAACT
AAATTTGACTTTTAGGAGTTAAAAAGAATATAGTATCTCAAATGAAAATTTTGCTGGATAGGATTAGGGGTAGATTAGAC
ACTCCAGAAGTTAAAGATCAGTGAGCTTGAATACACACAATAGAAGCTAGTCTAAACAAAGCACAGAGAGAAAAAGAA
CAAAACAAACCTCCCAACAACAAACAAACAAAGCCAAACCAAAATACAGCCTCAATGACCTATGGGAAATATTTAGC
AGTCTAATATACATGTAATTGGAATCCCTGAAGGAGGAGGGGGGTAGAATGTATCTTTTTTGTCCCTATGACTGCTG
TTAAGATTTTATTATTGATTTTTAGGAATTGCATTATATCTTGGTGTGGTTGTTTAAACAGAGGTATAGCTTATCAACC

Fig. 6.1

7/375

AATGGTGGAGCTAAAATAGAATACTTGAAAGTACTTATGGATGCACAGAATCTAAGATGGCCCCCAATTTTCTGCTAC
CTTGTACCCTTGAGTATATGTGGGACCTGTTACTTGTCTTAACCAATAAAATCTCACACCAGTTAGAATGGTGATTAT
TAAAAAGTCAGGAAACAACGGATGCTGGAGAGGATGTGGAAAAATAGGAACGCTTTTACACTGTTGGTGGAAGTGTA
TTAGCTCAGCCATTGTGGAAGACAGTGGCAATTCCTCAAGGATCTAGAACTAGAAATACCATTGACCCAGCCATCCCG
TTACTGGGTATATAACAGAGGATTATAAATCATTTCTACTATAAAGACACATGCACACGSTATGTTTATTGCGGCACTGT
TCACAATAGCAAAGACTCGGAACCAACCAAAATGTCATGATGATAGACTGGATGAAGACAATGTAGCACATATACAC
CAGGGAATACTATGCAGCTATAAAAAATGACGAGTTCATGTCTTTGTCAGGGACATGGATGAAGCTGGAAACCATCATT
CTCAGCAAATATCACAAGAACAGAAAAACCAACACCACATCTTCTCACTCATAAGTGGCAGTTGAACAATGAGAACAC
ATGGACACAAGGCAGGGAACATCACACACCGGGGCTGTGTGGGGGTCGGGGGCAGGGGGAGGGATAGCATTAGGAGA
AATACCTAATGTAGTTGACATTACTTTGGTTTGACATTACTTTGGTTTGTGGGTGCCACAAACCACCATGGCACATGTA
TACCTGTGTTACAAACCTGCACGTTCTGTACATGTACCCGAGAACTTAAAGTATAATAATAATAAATAACATGTATGT
CAAGGGTGACATGTAATTAAGCAAAGCTCAGTAAATTTAAATGATTGAAATGTACTAAGTTTTCTGACCACGCTAGA
ATTAAGCTAGAACTCCAGGTCCAGATGGCTTACTGATCAATTTTACCCAACACTTTGGAATGAATAATGACATTTGTAT
GAAAGTCCTTTGAGAAAATAGAAGATGAGGGAATATTTCTGAACCATTTTATGAGGCCAGTATTGACATGGGTAATAA
AACCAACAAATACATTACACAAAAAATTTGTAGCACATGATATCCCTGATAAAACCAATGCAAAAAATACATTAAATTT
GCAATTTGAATGCAGCAGTAGATAAAAAAGGACAATAATACATCATGAGGCAAGTAGGGTTTATCCAGCAAGGTAAGACT
GGTTTAACATCTAAAATCAATCAGTATAATTCATCATATCGATAGGATGAAGGAAAAAACTCATGTGACCATCTCAAC
GATTGCAGAAAATGTATGTGACAATATTCAACACCCATTAAATGATAAAAAATGTTAAATACATTACAATAGAAGAACT
TCCTCAGCCTTATCAAGGGTACCTGTGAGAAAATTATGGATAACATTTTTCTTAATGGTGGTAGACTGAATGCTTTCCC
CTATGGTCAGAAAAGACAAAACCTCATCACTGCTATACAACATTTTATGAGAGGTCAGCAGTGCTTTCATGCCTTAAAG
GCATGAAAATGAAATAAGTGATTTAAGATTGGAAGAAGAACTAAACCTACGTTTGTGATATCAAAAAATCCCAAGAAA
TCTGCCCCCAAAAGCACTTATGAATTAATAATTAACCTTAACAAGGAAGCAGGATATAAGACCACTGTATAAAAAATCA
ATTGGAAGAACTAAAACAAAACCCCAAAAAACCAACCTAATAATCTGTTTCCAATAACACCAAAAAACATGGAACTC
AGGGATGAATTATAAGTAGGGATAAAACAAGGTGTGTGCAAGACCTGACAATGAAAACTATTAAATGTTGTGAGAGGAA
CTAAGGATGACTTAAATAACTGGAGAGACATACTATGTTTATGACTGAAAGATATGCAATATTGATAAGATGTCAATT
CTTCCAAAATTGATACATGGATTATTTAGCTTGGTAAAAATCCAAGCTTTTTTTTTGTAGAGTTTTCAAGCATTTTGTAA
AATTTATTTGGAATACAAATAATCTGAATAGCCAAAACAATGTGGAGAAAAGGAGAAAAAATTAGAGAACTTACATT
CCTGTTTTTAAGACTTACTATAAAATCTTACTTTTCAAGGTGTGGTATTGGTATCTTACTGTAAAGTCTTCTGTAAAGTA
TATTGATATTTAGTGTGGTGTGGCATAAGGATAGATATTTAGGCCTATGGAATAGAATAGAGGGTCCAATAGTAGATT
CATGTATCTGTAGTCAAGTGATTTTTCAGCAAAGAAGCCAAGGGAAGGGATCATCTTTTCAAGGTAGTGTGGAACAACT
GGATATCTATTATGGAAGAAAGTGAACCTTTATACTGTATACTGTATGCACTCAAATTTTACTTTGGACTGGATCACAGA
TTCAAATATAATAGAGATATCTAAAAACCTTCCAAAAGAAAGTATAGGAGAAAAATTTCTTGCAATTTTGATAGACAAA
GATATCTTAGTTCTTAGAAAACATAACCATAAAATAAAAAATTACATCAAATAGACTTCATCAAATTTGGAATTTCTAC
TCTTTGAAATATACTGTTAAGAAAATGAAAAGACAAGAAAATTTCCATTACATAGCTCACAAAATACTTATAACTAGGA
TATGTAGAGAACACTTCAATACTAAGACAATGCAATAAAAAAACAACAACTGGACACAACAAGAAATATATGAAAT
ACTCATAAGCACATGAAAAGATTATTAACATCATTAAATCATAAGGAAATGCGAGATTAACCAACACGAGATACTACC
ATGTACACACTAAAATGGCTAAAGCCAAAGACACTGACATAAATTTTGGTGAGTGTGGGGCTCCTGGAGCCCTCAGAC
ATTGCTGATAGGACTGTGAATGACACAGCCACTTTGGAAAATGAGTTTCATCATTTTCACTAATACTTAAACATACACAT
ACCTTAATTTTCAATTCCTAGGTATTTATCTAAGGGATAAGAACACATGTGTTTACACAAAATGTGTGGTGTTCATAGCAG
CTTTATTCATAATATCAAACATTGGAACAATCTACATGTCTATCAGCAAGTGAATGGAAAAATATTTGTAGTATAT
CCATGCAATGAAATATTACCCAGCAATAAAAAATAAATATGGGTACATACAACAATATAAATGAATCTCAAAAAATATGC
CGAGTGATAAAAGCCATTCTGGTTCCATTTACATGAAATTTAGGAAAGGGGAATCTATGGAGGCAGAAAGCAGGTCAG
AGGTTGCTTTGGTCTAGGGGATCGAGAGGCCCTTACTGCCAACAGCACCAGTAGATTCTTTGGGGGGCGGAAGAGTTT
TATATTTTCAATGTTGTGCTGTTTACATGGGGATATGCATTTGTCAAAACTCACTGAGCTCTACATTTAAATGGGTAC
ATTTTTGTAGTATTTTAAATTATAAATCAAATTTGAACAAAAAGTAACACATGTTATTTGAGGACTTTTTTTTTTAAAG
CATCATGTTTTATTTTTATTTTTTGCAGACAAGGGTTTTATTTAATATAACTCATAAATTACATTGCCAATATCCTAAA
GGTAATAAAGAGTCAAAGCACTATTTGTGAAAATCAGTATATCATATGACGGTAAGCATAGTTGCTATTCCACAAAA
ACGTTTCAGAAAACATTTGAATTCATTGTCTGAAAGAGCTTAGGCTCAAGACTTGAATTACTAAGAAAAGAAAGTAGTAT
ATAATTATACAAAGATGAGTAATAACCAAAAACTGTTCTTTAATGCATGTTTGTTTTTCTGAAAGCCATTTCTTTCTT
TTTTCTTTTAACTTTAAGTTCTAGGGTATACTTTAAAGTTCTAGGGTACATGTGCACAACATGCAGATTTGTTACAT
ATGTATACATGAGCCATGTTGGTGTGCTGCACCCATTAAAGTCGACATTTACATTAGGTGTGTCTCCTAATGCTATCCCT
CCCCACTCCCCCTACCCAGGACAGGCCCGGTGTGTATATTTCCCTTTCTGTGTTCAAGTGTCTCATTGTTCAATG
AGTGAGAAATAGAGGTGTTTGGTTTTTGTCCCTGCGATAGTTTGTGAGAAATAGGTTTTCCAGCTTCATCCATGTCC
CTACAAAGGACATGAACCTCATCTTTTTTATGGCTGCATAGTATTTCCATGGTGTATGTGTGCCACATTTTATTTTAT
TTTTATTTATTTTATTTTTTAAATTTTATTTATATACTTTAAGTTAGTGTACATGTGCACAACATGCAGGTTTGTATCAT
ATGTATATATGTGCCATGTTGGTGTGCTGCACCCATTAACTCGTCATTTAACATTAGATATATCTCCTAATGCTATCCC
TCCCCCTACCCCGACCCACAACAGTCCCCGGTGTGTGATGTTCCCTTCTGTGTCAATGTGTTCTCATTGTTCAATT
CCCACCTATGAGTGGCAACATGTGGTGTGTTGGTTTTTGTCTTGAGATAGTTTGTGAGAAATGATGGTTTTCCAGTTTC
ATCCATGTCCCTACAAAGCACATGAACCTATTATTTTTTATGGCTGCATAGTATTCGGTGGTGTATAGTGCCACATTTT
CTTAATCCAGTCTATCACTGATGGACATTTGGGTGGTTCCAAGTCTTTGCTATTGTGAATAGTGCTCAATAAACATA

Fig. 6.2

8/375

CGTGTGCATGTGTCTTTATAGCAGCATGATTTATAATCCCTTTGTGTATATACCCAGTAATGGGATGGCTGGGTCAAATG
GTATTTCTAGTTCTAGATCCTTGAGGAATCGCCACACTGTCTCCACAATGGTTGAACCAGTTTACAGTCCCACCAACA
GTGTAAAAGCATTCTTATTTCTCCACATCCTCTCCAGCACCTGTTGTTTCTTGACTTTTAAATGATCGCCATTCTAACT
GGTGTGAGATGGTATCTCATTGTGGTTTTGATTGTCATTTCTCTGATGGCCAGTGATGGTGAGCATTTTTTTCATGTGTC
TTTTGGCTGCATAAATGTCTTCTTTTGAGAAGTGTCTGTTTCATATCCTTCGCTACTTGTGTGATGGGGTTGTTTGT
TTTCTTGTAATTTGTTTCGAGTTCATTGTAGATTCTGGATATTAGCCCTTTGTCAGATGAATAGATTGTGAAAATTTTC
TCCCATCCTGTAGGTTGCTTGTTCCTCTGATGGTAGTTTCTTTTGCTGTGCAGAAGCTCTTTAGTTTAAATTAGATCCT
GTTTGTCAATTTTGGCTTTTGTTCCTTGTCTTTTGGTGTTTTAGACATGAAGTCTTGCCTATGCCTATGCTGTAATG
GTATTGCCCTAGGTTTTCTTCTAGGGTTTTATGGTTTTAGGCTAGCATTTAAGTCTTTAATCCATCTTGAATTAATTT
TTGTATAAGGTGTAAGGAAGGGATCTAGTTTCAGCTTTCTACATATGGCTAGCCAGTTTCCCAGCACCATTTATTA
TAGGGAATCATTTCCCATTCTTGTTTTTGTCAGGTTTGTCAAAGATCAGGTAGTTGTAGATATGTGGCATTATTTCT
GAGGGCTCTGTTCTGTTCCATTGGTCTATATCTCTGTTTTGGTACCAGTACCATGCTGTTTTGGTGAAGTGTAGCCTTGT
AGTATAGTTTGAAGTCAGGTACCGTGATGCCTCCAGCTTTGTTCTTTTGGCTTAGGATTGATTGGTAAATGCGGGCTCT
TGTTTGGTTCATATGAACCTTAAAGTAGTTTTTCCAATTCTGTAAAGAAAGTCATTGGTAGCTTGATGGGGATGGCA
TTGAATCTATAAATTACCTTGGGCAGTATGGCCATTTTCACAATATTGATTCTTCTTACCATGAGCATGGAATGTTCC
TCCATTGTTTGTATCCTCTTTTATTTCTTGGAGCAGTGGTTTTGTAGTTCTCTTGAAGAGGTCCTTACATCCCTTGT
AAGTTGGATTCTAGGTATTTTATTCTGTTTTGAAGCAACTGTGAATGGGAGTTCCTCGTATTTGGCTCTCTGTTTGT
CTGTTATTGGTGTATAAGAATGCTTGTGATTTTGCACATGATTTTGTATCCTGAGACTTTGCTGAAGTTGCTTATGA
GCTTAAGGAGATTTTGGGCTGAGACGATGGGGTTTTCTAGATATACAATCATGTCATCTGCAACAGGGACAATTTGAC
TTCTCTTTTCTAATCGAATACCCTTTATTTCTTCTCTTCTGATTGCCTTGGCAAGAACTTCCAACACTATGTTG
AATAGGAGTGGTGAGAGAGGACATCCCTGTCTTGTGCCAGTTTTCAAAGGGAATGCTTCCAGTTTTTGGCCATTGAGTA
TGATATTGGCTGTGGGTTTTGTCAAAATAGCTCTTATTATTGGAGATACATCCCATGAATACCTAATTTATTGAGAGT
TTTTAGCATGAAGGGCTGTTGAAATTTGTCAAAGGCCCTTTCTGCATGTATTGAGATAATCATGTGGTTTTTGTCTTTG
GTTCTGTTTATATGCTGGATTACGTTTATTGATTTTTCATATGTTGAACCAGCCTTGCATCCCAGGGATGAAGCCCACTT
GATTATGGTGGATCAGCTTTTTGATGTGCTGCTGGATTCCGTTTGGCAGTACTTTATTGAGGATTGTTTATTGATGTA
CATCAGGGATATTAGTGTAATAATCTCTTTTTTGTGTTGTCTCTGCCAGGCTTTGGTATCAGGATGATGCTGGCCTCA
TCAAATGAGTTAGGGAGGATTCCCTCTTTTTCTATTGATTGGAATAGTTTCAGAAGGAATGGTACCAGCTCCTCCTTGT
ACCTGTGGTAGAATTTGGCTGTGAATCCGTCTGGTCTGGACTTTTATTGGTTGGTAAGCTATTAATTTATGCTCAAT
TTCAGAGCCTGTTATTGGTCTATTTCAGAGATTCAACTTCTTCTGGTTTTAGTTTTGGGAGAGTGTATGTATCGAGGAAT
TTATCCATTTCTTCCAGATTTTCTAGTTTCATTTTCATAGAGGTGTTTATAGTATTCTCTGATGGTAGTTTGTATTTCTG
TGGGATAGGTGGTGATATCCCTTTATCATTTTTTATTGCATCTATTTGATTCTTCTCTCTTTCTTCTTTATTAGTCT
TGCTAGCAGTCTATCAATTTTGTGATCTTTTCAAGAAACCAGCTCCTGGATTTCATTGATTTTTTGAAGGGTTTTTGT
GTCCTATTCTTCTTCAAGTTCTGCTCTGATCTTAGTTATTTCTTGCCTTCTGTTGGCTTTTGAATGTGTTTGTCTTGTCT
TCTCTAGTTCTTTTAAATTGTGATGTTAGGGTGTCAATTTTAGATCTTTTCTGCTTTCTCTTGTGGACATTCAGTGCAAT
AAATTTCCCACTACAACTACTTTGAATGTGTCCAGAGATTCTGGTATGTTTTGTCTTTGTCTTTGTGGTTTCAAAG
AATATCTTTATTCTGCCTTCATTTTGTATGTACCCAGTAGTCATTTAGGAGCAGGTTGTTCAATTTCCATGTAGTCG
AGCGGTTTTGAGTGAGTTTCTTAATCCTGAGTTCTAGTTTGATTGCACTGTGGTCTAAGAGACAGTTTGTCAATAATTC
TGTTCTTTTACATTTGCTGAGGAGTGCTTTACTTCCAATATGTGGTCAGTTTTGGAATAGGAGTGGTGTGGTGCTGAG
AAGAATGTATATTCTGTTGCTTTGGGGTGGAGAGTTCTGTAGATGTCTATTAGGTCCACTTGGTGAGAGCTGAGTTCA
GTTCTGGATATCCTTGTTAACTTTCTGTCTATGTGGATCTGTCTAATGTTGACAGTGGGGTGTGAAGTCTCCCATAT
TATTGTGTGGGAGTCTACGTCTCTTAGTAGGTCTCTAAGGACTTGCTTTATGAATCTGGCTGCTCCTGTATTGGGTGCA
TATATATTTAGGATAGTTAGCTCTTCTGTTGAATTGATCCCTTATCATTATGTAATGGCCTTCTTTGTCTCTTTTGA
CCTTTGTTGGTTTTAAAGTCTGTTTTATCAGAGACTAGGATTGCAACCCCTGCCTTATTTTGTTTTCCATTGCTTCGCA
GATCTTCCCTCCATCCCTTTAATTTGAGCCTATGTGTGTCTCTGCATGTGAGATGGGTTTCTTGAATACAGCACACTGAT
GAGTCTTGACTCTTTATCCAATTTGCCAGTTTGGGTCTTTTAAATTGGAGCATTTAGCCCATTTACATTTAAGGTAAATA
TTGTTACGTGTGAATTTGATCCTGTCTATTATGATGTTAGCTGGTTAATTTGCCTGTTAGTTGATGCAGTTTCTTCCTAG
CCTCGATGGTCTTTACAATTTGGCATGATTTTGCAGTGGCTGGTACCGTATGTTTCTTCCATGTTTAGTGCTTCCCTC
AGGAGCTCTTTTAGGGCAGGCTGGTGGTGACAAAATCTCTCAGCATTTGCTTGTCTGTAAAGGATTTTATTTCTCCTT
CACTTATGAAGCTTAGTTTGGCTGGATGAAATCTGGGTTGAAAATTTCTTCTTCCAGGAATGTTGAATATTTGGTCC
CCACTCTCTTCCGGCTTGTAGGGTTTCTGCCGAGAGATCAGCTGTTAGTCTAATGGGCTTCCCTTGTGGGTAACTGGA
CCTTTCTCTCTGGCTGCCCTTAACTTTTTCTTCTCATTTCAACTTTGGTGAATCTGACAATTTATGTGTCTTGGAGTTG
CTCTTCTTGGAGGATCTTTTGTGGCGTTCTCTGTATTTCTTGAATTTGAATGTTGGCTGCCCTTGTAGATTGGAGAA
GTTCTCCTGGATAATATCCTGAAGAGTTTTTCCAACCTTGGTTCCATTCTCCCCGTCACTTTTCCAGGTACACCAATCAGA
TATAGATTTGGTCTTTTTCATAGTCCCATATTTCTTGGAGGCTTTGTTCTGTTTCTTTTATTCTTTTCTGTAACT
TCTCGCTTCATTTCACTTCTTCCATCACTGATACCTTCTTCCATTTGATCGAATCAGCAACTGAGGCTTG
TGCATTATCATGTAGTTCTTGTGCTGTGGTTTTTCACTTTCATCTGGTCTTTAAGGACTTCTCTGCATTGGTTATTCT
AGTTAGCCGTTCTGTGATTTTTTTTTCAAGGTTTTTAACTTCTTTGCCATGGGTTTCAAGCTTCTCCTTTTACCTCAGAG
TAGTTTGTATCATCTGAAGCTTCTGCTCTCAACTCGTCAAAGTCATTCTCCATCCAGCTTGTGTTCTGTTGCTGCTGAGG
AGCTGCGTTCTTTGGAGGAGGAGAGGTGCTCTGATTTTTAGAGTTTCCAGTTTTTCTGCTCTGTTTTTCCCCATCTT
TGTGGTTTTATTTACCTTTGGTCTTTGATGATGGTGACGTACAGATGGGGTTTTGGTGTGGATGTCCTTTCTGTTTGT

Fig. 6.3

9/375

AGTTTTCTTTCTAACAGTTAGGACCCCTCAGCTGCAGGTCTGTTGGTGTTTGCCTGGAGGTCCACTCCAGACCCCTGTTTGC
CTGGGTATCAGCAGCAGAGGCTGCAGAACAGCAGATATTGGTGAAACAGCAAATGTTGCTGCCTGATCGTTCCCTTTGGAA
GTTTTTTCTCAGAGGAGTACCCGGCCATGTGAGGTGTCAATTCAGCCCCCTACTGCGGGGTGCCCTCCAGTTAAGCTACTC
GGGAGTCAGGGACCCACTTGAGGAGGCAGTCTGTCCATTCTCAGATCTCAAGCTGCATGCTGGGAGAACCCTACTCTC
TTCAAGGCTGTGACAGAGTGACATTTAAGTCTGCAGAGGTTATTGCTCCCTTTTGTGTTGGCTATGCCCTGCCCCAGAG
GTGGAGTCTACAGAGGCAGGCAGGCCCTCCTTGAGCTGCAGTGGGCTCCACCCAGTTCAAGCTTCCCGGCTGCTTTACCT
ACTCAAGCCTGGGCAATGGCGGGCGCCCCCTCCCCAGCCTGGCTGCCACCTTGCAGTTTGATCTCAGACTGCTGTGCTA
GCAATGAGCAAGGCTCCGTGGGCATAGGACCCCTCCGAGCCAGGCACGGGATATAATCTCCTGGTGTGCCATTTGCTAAG
ACTGTTGGAAAAGTGACAGTATTAGGGTGAGAGTGACCCGATTTTCCAGGTGCCGTCTGTACCCCTTTCTTTGACTAGG
AAAGGGAATTCCTGACCCCTTGTGCTTCCAGGTGAGGCGATGCGTACCATTCTTTGGCTCACGCTTGGTGTGCTGC
ACCCACTGTCTGCACCCACTGTCCGACACTCCCAAGTGAGATGAACCCGTTATGTGAGTTGGAAATGCAGAAATCACC
CGTCTTCTGCGTTGCTCACGCTGGGCACGTGTAGACTGGAGCTGTTCCTATTTGGCCATCTTGGTTCCATCCCCCTACT
TTTGAGATTTTAAACTTGGGATGCCCTTTGATTCAATTTATTCAAGTATTAAATTTGAGTAAAAAGTCATGTATGTGCATG
AAGTATTAGCTGCAGTGGTGGTTTTGTTCTTACATACTTTGCTCATAATAGCTTTGTTTATTTATTTATTTATTTATTT
ATTTTTGAGACAGGGTCTTGCTCTGTCAACCAGGCTGTAGTGCAGTGACATGATCTTGGCTGACAGCAACCTCTGCTTC
CCAGGTTCAAGTGATTCTCCTGTCTCTGCCCTCTGAGTAGCTGGAATTACAGGCATGTGCCACCATGCCCTGGCTATGTT
TTGTATTTTTAGTAGAGACAGGGTTTTGCCATGTTGGCCAGGCTGGTCTCGAATCCTGACCTCAGGTGATCCACCCGC
CTTGGCTGCCCCAAGTGCTGGGATTACAGGCATCAGCCACCATGCCCTGGCTGCTAATAATAACTTTAAAAAACCTAAC
ATTTTCATATTTTGATAAATAAATGCAGTACTCATATCCAGTTGAAAGGGAAATACAACATTATTTAATAAACATATTAC
ATCTAAATATTAATAAAATTCCTATCATATGATAAATTAATAAAGAGAAAGAGATTAAAGCAGGGGCTTAGAAACATAAA
CAAATATAAACAAACTTTACAAACTGAATGGATTAGCAGGGTGTGGGGCACATGCTTGTAGTTCCATCTCCTTGGAA
GGCTGAAGCAGAAGGATCCCTTGAACCTAGCCAGGCAATAAAGCAAGACCCCTGTCTCTTAAACAAAACAAAACACAAA
ACAAAACAGAGACAATTGGAGGAAGACAGAACTAGAAAGAAAGTGTAATAAATAAATAACACCCCAAACTCACAGAA
ATTAAAGTGATTTTTAAAGTTGGGTTGTTTATTTGTTAACTATGAGCATGACCGCTCTACAGTCAGAAAAGATAAAAT
CAAGGCTCAGATGGGGAACGCATGGTGTGCTTTTAGAACCATGCTCAGAAAGATTTGGTGGAGTTTAAACAAACAAG
TTCAGACTTCTGTTGCCCTCTTTATAGGAGTGAAAGAGAAAGGAAGAAAGATTACAAAGGTGTAAATCCCTTTTCAT
CCCCTGGACCACAGAGGTGTAGCAGAGAATGGTTCCTGTAAAGACTGAAAGTACAACTACATAGGTGCAATTTGT
GACTAAGTATCACTGGTACAAAGAACTTAACTGATTGAAATATATCAATAAGTAATCTCTTGGGTGCTCATACAGGAAT
GCTTAAACCTCAGACCCAATTAATGGCAAAAACATGACCTACATCTGTTTTTTATGTATACACACACACACACAC
ACACACACACACACACACACACACAAATACATATGTAACAACCTTTTTTCATGGACTGTCTTAGTTTCATCTCATTTT
GAGGAAATAGTTGTTGAATGACTTCTGTGTGTTTCTGTGACATTGTATTAAGTATTCAAATACAGACTTAAAAAGTAA
CTTCTCTTATGGCTATTATATTTTAATATTCCTGAGGCAGATCATTATCGATTACCTGTGCTGCTCTCTTGGGGTTTCC
ATGATATCCCCTTGACACATCTCTATTGTGTCTTCCACATTGCTTTGTGATGGCTTCTGTTCTGTTCTCTCTCTCC
AGACTGTGAGCTTCTTGATAACAAGATCTTTGTCTCACTGTTTTGGGATTCTCAGATCTTAGCACAGTCTTAGAACATT
TTATGCTCTTTTCAAACCTTCGTTGAATGAATACATTAATGATTCTCAAGTATATATTTCAAGTGTTGACCTGTCCCCT
AAATTCCAGAGCTGCTATCATCATCTTCTGTTGAATATTTCCATGAGTCTACTATCTTTCAAAACCCAAACTGCTTC
TCTTCCGTGACAAATCAGCAGCCCCCTTCTGGCTCCACTGTTTTTGAAGTAGGCCCCCTTAAAGCTGAAGATTACAGTT
TATTTGTCCATAGTTGCCCTATCTTAGCACCTATTTTAAATGTGTTTTTGTATGCAGACTTTGTAAGGGTCAAATC
ATGGCCTTCAAATCGATTTAGAGAAATGAAATCTCGCAATGAATATCTCATGAGAAGAGAAGCATAATGAAGACTACA
AAAAAGCAATGCATTTAAAAAGTAGCATGTTGCTCCTGTGTGTGTATAGCACAAAGAGAAGCTTAGAAGAGTGACGATAT
CTCCAGCTGTGACACTTTTATTTTATATCCTTCAGTTATTTGTGGCAATGATGGAAACCAGAACAAATATGATTGACAT
CCTTAGAGTATTACATAACATATTCTAGCTCGCATGTGACCTTGCAATTCCTCAGACCTTACCATTCTCTTTTAA
ACAAATTTTTAAATTTTCTAACAATCTCCAGTTTACAAGAACGGCTATAGCACAGTCCAAAGACCTTTTCTTTTCTT
TTTCTGAACCATTTGAAAGTAAATTGCTAATCAAATGTTCTATACCTATAAATACTTCTGTGTGTTTTTCTTACAAAC
TAGGTCACTTCCCTGCAGGACCCCTCAGACAAGCATAAAAAATCAGGAAAGTAACACTGATTACTTACTATTACTTACTAT
TCTTTTTTTTTTTTTTTTTTTTTTTGAGCAGATCTCAACAGTGGGCTTAAATCTTCACTAAACCATGTGTTGTCTATTCTG
GAACACAGGTAGAATAGATGTAGCATAATTCTATTTTTTTTTTTTTTTTTTTAGGTGGAGTCTTGTGCTGTTGCCAGGCT
GGAGTGCAGCGGCACAATCTTGGCTCATTGCAACCTCCACTTCTGGGCTCAAGCAATTCTCCTGCCTCAGCCTCCCAA
ATAGCTGGGACGACAGGCACATGCCACCATGCCTGGCTAATTTTTGTATTTTTTAGTAGAGATAAGGTTTACCATGTTG
GCCAGGCTGGACTTGAGCTCCAGACCTCAGGTGATCCACTCACCTCAGCCTCCCAAAGTGCTAGGATTACAGGCATAAG
CCACTGCACCCAGCCAGATGTAGCATAATTCTTAAAGGGCCCTAGGATTTTTGGAATGGTAAAGGAGCACTGGTTTCAAC
TTCAAGTCACCAGCTGTATTAGCCCCTAACAAGAGAGCCAGGCTGTCTTTTCAAGCTTTGAAAGCCAAATATCGACTTCT
CCCTTCTAGTTACAAATGTCTAGATGGCATCTTCTCCATTAAAGGCTGTTTTTGTCTACATTGGAATCTGTTGTTT
AATGTAGCCACTTTTATTATGATCTTAGCTAGATTTTCTAGATAACTTGCTGCAGCTTCTACATTAAACCTTGCTGCTT
CACCTTGCACTTTTATGTTATGAAGACAGCCTCTTCTCCTCAAACCTCATAAACCAGCCTCTGCTAGATTCCAGGTTTTT
TTCTGATGTTTCCCCACCTCCCTCAGCCTTTATAGAATTGAAGAGTTAGGACTTTTCTCTAGGTTAGGGTGGGGCTTAA
AGAAATAGTTGTGCTCACTGGAGTGGCACTTTAGTCTCTTTCAAGAACCTTTCTTTGCAATCATAACTTGGCTGTTT
GGCACCAGAGGCTAGCTTGTGACTTCTCTCAGCTTTTGACCTGCCACCCCTTACTAAGGTCAATGATTCTTTGATTT
AAGGTGACAGATGTGTGACTTCTCTTCACTTGAACACTTAGAGGCCATTGTAGGGTTATTAATTGGCCCAATTTCAAT

Fig. 6.4

10/375

ATTGTTGTGCTCTGAGGGAATAGAGAGAGGAGGAGGAGAGAGACAGGGGAACCCACTGTTGTGGTGAGAGACAGTACAGTACAGACACACACATTGGTTGATTAAGTTTCACAGTCTTATGGGCATATTGTGTGGTTCCCCCAAACACTTACAGTAGTAACAGCAAAGATTACTTATTGATCATAGGTCATAATAATAGATAAAATAATAATTAAAAAATTGAAATATTCTGAATTACCAAAAA

TGTGATACAGAGACATGGTGTGAGCCCATGTTGTTGGAAAAATGGTGGTGATAGCCTTGATTAACACAGGGTTGCCACA

AACTTCAATTTGTAAAAACATAATACCTGCAAAGCAACTAAAGTGAAGTGCAGTAAACGAGGTATACCTGTATAT

TAATAGGTGACTCCAATAAAGACTTCGGTAATCTATAACAAGGAGCCAACCTATCAAATGGCAACTGCAAAGATAGTTCT

CTCAC'TGAAGCTAACAAAAACATCTACAACTTTTCAGCTGAAAAATCAAAAAAGTTTGAGTTGTATAGGACATTCTAAC

ACCAGGGAATGAGACATATCTTTTTGTATGTAATAATAATGCAAGCCTGAAAGTCTTCCAGTGACTCACAGAGTAATAA

CTGTGACAGAGGCTTTCTGAATTACACATGGTGAATTTTACAAAAACATAATATGTGGATGATGTTTACATAAGTTTAT

ATCTTCTTCCATACTATGTAATGTGGTTCTACAAATGTTTAGGTAATTAGGGTTTAGGAGGGTATAATTAAATGATTTA

TTATTCAATAATATGCTTGTGTTGGGACATTGTGGAATTTTACCTGCTATTGTTGTGAGGCCCGGAGCCAAATTTAATC

TTATCTATTAGTGCACAAATATATTTCTTAACCAGATTTTAAAGAAAAATCTAGCCAAAGTTGTATGTGATTATGTTGTA

TCTTCTCCTGATGTTAGTTTAAATGTTTAAAGATAGTAGTAGCTATGATTGATGCCACTGAACTTTTAGTTCACTTG

ACTCCTCTATATAGCCCATGGATACCCAGTGTAGTAGTACATTGATTGGTTTATGACTATTGACACCACTTTCTGATTTA

TGAAGGTTGACTTGTCCACAATCGGTGAGAGCTGGGAATTAATCCAGATATCTGGCTACAATCCCAATGAAGAGATGGG

TCATTCTTATCCTTCATTATGTAATTCATTATTCATATCATTTCATTTCATTCTTTTACACAGAAATGTGTTGGTAC

CTATGATGTACCAGGTATTTTTCTAGCCATGGGAGGCATATCAACAAATGAAAAATGATAAGAACCCTACCTGTGGAG

CTTACATTCCAGTAGGGCAGAGGGGAAACAATGGCAGATAACATAATAAGTAAATTTCTGTAGTATATTAAGTGGTAGTA

ATGTATACTTGGAAAAAAGTAAGCAGGTAAATGGAATTTGGGCATACCAATTTTATACCTCTTTGGAGGGAGATATGAAT

TAATTTTTCAATTTTATCTCATAAATTATGTCAAAAATAAGGTTTTGTCCCAAGCCTTTCCAAGCAGGTAGCCTGGAA

CAAGTGTCTGCTCTTCTCCTCTCTCCCACTACTCAGAACATTGCTATAAAAAGATAGCTAAATTACAAGATCAACTTA

CAGAGTCCCTACTTAATTCATTATGTAGCTCAACTGTGGTTCAAATCTAGTAGTGTTATAGACCTAACCAAGTCCTTACAG

TGGGTTTTCTCCCCAGTCTGGTAAACTGTATTCCATGCTCCAGCTGCAGGTGACAGGAACCTCATCCTTTTCATGCTGCT

CTTTTAGCTTTGGGAGTAAGCAACTCCCTCTCCTTCCACATTATCCAATATTGTGCGGCAGAGACTTGCTTCCATTAA

GATACTGATAGTGGCTCCTCCACTGCTAGAAGCAGGAGGATGATCTTGGGGAATGATTATGGATTTAAAGGAGGAAGAG

ATAGTAGCATAGGCTTCTGTTTTTACAGGAAATAGGAAGGTTGACAGTTGGAAGAAATCGTAGAGGAGTCCCAGCTGGG

ATCAGTGACAGAGGGAGGAAAAGGGAGGCCCTGGTCTCAGAGAAAGGTTGAGTTATTGGGATGTTTATGAGTCAAGGA

TGTCGCTTATCACCAGTAGTAGGTTTTCTGTAGATAAATTCCTGAGATGAATTTACCTATGCCTTCTTGCTTGATTT

CTTTTTTGCTTTTTCTTTCTTCTTCTCCTTTCCCTTTCCCTTTCCCTTTCCAGGGTATGCTCTTTTGGCCAGGCTGGAG

TGCAGTGTGCAATTATAGCTCACTGCAGACTCAAACTCATAGGCTCAAGTGATCCTCTTGCTCAGTCTCTGTAGTAGC

TAGGACCACAAGCATGCACCACTATGCCTATCTAATTTTTTAATGTTTTTGTAGGGATGGGATTTTGCTATGTTGTCCA

GGCTGGTCTTAAGCTCCTGGCCTCAGGTGATCCTTCCATCTTGGCCTCCCAAAATGCTGAGATTATAGGTGTAAGCCAC

CATGCCTAGCCTCATTTAATTTTCATAAAGTCTGAAATTATTATCTACTCTAAGTTTGGCAAGCAACTGGTTGTTTAGA

GTTTAGTAATAATTTTTTGAAGAGATATAATGGATATAATTTTTTACATATTTGTTTAATAGCATCCTCACAAAGAAAT

TTAAATTTCTTTTATAGAATTCTGATTATTTTACAGCCCTGAGGTACTCTTAATTTTTAAATATATTTCTTTTTTAAT

ACATTATTTTTTCATAAAGCTTTTATAATCAGCATGCTTTTATTTTTTAAATATATTGTACTACTAATATTGTTGCATAA

CTTCAAAAAATTATCATTTAGTAGCCATATAATACTGGCTAATAATTAACATAATATAATATAATAATAATAATAATA

TAATATATAGTCTATTGATAAATAGGTATTTGAGTGTATCTGTTTGCCTTGTATTATACTAGGAAATGTGGCTTGCC

AAAAATAATGCATTATGCTTTCGGTTAGCTTGTAGTCTCATTCATAAAGCAATGTAGATACAATGCAGTAAGGATAAGG

TGAAATCTGCCTTTGCAAAGGGATTTTAAATTTGGAAAAAGAAGGGATTTGTGGGACAATGAGATAGAAGGCTTTACAG

AAAAACTAGATGGCTTTGTGGAGAAAGAGAAATTTAACTAGTTATTACCAGTTCAACCGCTACATCCCCATTACAGCCAT

CAGCACTAGTGTGTCTTCTCTTTCCCTGACTTTCCCTTGCAATCTATTGCTATACAGGTGCCACAGTAAAAAGCAA

TTGAGATCAAGTGACTCCTCTGTGTCAGAACCCACCAGTGGTTTTCTCAGGTCAATTTATAATGAACCCCTCAGTCTTTAAT

GATATAGCCTACAAAGTTCTGCATGATCTGCCCCCTTGGCTGCCTCTCTAACCTGATTCTTGACTTGTGTTTCTTAC

ACACACTGTCTCTTGATGCTGGACGCATTCTGTACGTACACACTCCAGCATGCTCTCACATTACAATTTTCTGTAAT

TGCCATTCCCTCCACCTTGAAAGTTTGTCTCTGCAGTATTTCCCTGGCTTGCTCTCATTTCCCTTTGGATCTCTGCTCAC

ATGTTACCTCCTTAGAGAGGGCCTTCTGAAAATGATAGAAGTGTTTTTTTTGGAGCACATCCCCCTCACTCCCCAGCTC

CTCTCCAGTGATTTTTCTCCATAGCATCTTTCTGCCTGACCTTGTATTTCTATATCTTTTTTGCTTTTTTATCTTCTGGA

AAACAAGCTCCATGAGATCACACAGGGATTTTGTCTTATTCTCTACTGCATGTCCCCTCCTAATACAGTTCCTGGAATA

CAGGTGGGGGTTTCAATAATTTGTTGGGTAAATGAAAGAATATATTAAATATTATCATAAACCTTTTTTCTTTCCAT

GATTTGATGATGTGGAATTGAAAAAGGTTCTACATAGATGATAGTGATATAATCAACAGCATTCTCTGAGTACGTCTAGG

ATCAGCACTTGGTCTAGAAAAGATCTGTCTTCTGCCCTCCTTTCCCGTCCATGCACATCCACTGCCTTTGGGATCAAAC

CCAATCTCCTTCTCTGGCAGTCAGGGCCTTCTGAGACCTCATCTCTGTTGATCTTTCTAGCTTTACTTCTACCAAGTC

ATTCCCCCTCATAACTGCATGTCACTGAGTGGCTTATAGTTCCCCCTCCTGTGGCCCTTGCGAGATATTTCTTGCAATTGC

TTTTTATTTTGTCACTATTGTTGTTTATGGGTTTCTCCTCAGAGTCATAAGCTCTTCAAAGGAAGAGGCTTGGTATATCT

TGTATTTTCTGGGATCTAGCGCAGTTCTTGATATTGTAGTAGTGGTCAGTAAATACTTATTCAATGTAAAAGATGTTTTT

TGCTTTCAAAGACTAGTGGTAACCTGAAATGGTTGGATATAGGACAGATAAACTGATAGAAGCAGTTTACCTCATTA

GAGGGCTTGGATATAAGTATGTCCAGGGACAAATATAGTAAAAAAGAGAGCAATATTATAATCTTTTAAAAA

AAAGAGACAGGTCTTGTGTGTTGCCAGGCTGGTGCCATTATGGCTCACTGTAACCTCAAACCTCTGGGCTCAAACAG

TTCTCCTCCTTACGCTTCTGAAATAGCTAGGACTACTGGTGTGTGCCACCATGGCGGCTAATTAATTTTTTTTTTTTT

Fig. 6.5

11/375

[illegible]

Fig. 6.6

12/375

[illegible]

Fig. 6.7

13/375

CATATATATTAGTTGATGTTTACCTATAAGTGAGTAGATTTTCATCTGCCTGCAATGGTATAATTTTCAGTCTTAGCTA
AAAATGGAAAGTTGAACTGGATAAATTCTTTGGGTACCTTAGACCTCTGATTCTAAGTCAAATGCAAATGGGTAAAT
AAAATGAGACTACTTCCTTTATAAATATATTTTCATCCTTTTGAAAGTAAGTGAAATGTAAATAAATTTATTTTTTTTA
AAAATGCCATACCTCGTGTTCCTTTTTTGGCATTTATTTAGATCAGTTAGAGAGCATCCTCAAATGCCCTTTGCCAATGG
TCTTCATCAGTCATTTATTTCTATGAGAAAATGAAAAGTAAGATTTGGGCTTTTGTACTGACTGGTCTTTAGGTGAGCA
CTTTGCCAATTTTTTAGCATTGCTTTGTCTTTTGTAAAATTTGTGGTGCACTTGGATTATGGAGCATCTGAAAGTCTTC
CTCTGAGCGCAATTACCCAGAAAGCTGAGAGCAACACCCACTAATTGGCTTACAGTACTCCTTGGACTGATTTTTCCCTT
GCACTTAAGATTTGCTCCTGTTCTCTTGTAGCAAAATACCTCCTACATCTGATGCAGATTTTGCTTTTAAAAATGGACC
AAAGTATTCCTATTGGTTTGGGTACCACCTTACATTCCAAATACATAATGTAATGGGAGATTTTTAGTGTTTCAGGATT
CATTTCTCAGATTTTGGCATTCTGTTTAGAGCCAAGAATAATCTTCTTTCTGCTCTATTTTCACTCCGAGGTAGAGTTT
ATTTTTCTCAGAATCTCTTTTCTGTTGCTTGTCTTTGGAAGTATATGTGGTTGTTTTCTTTCTTTTAAAGATTA
CTTTTTTAAAAAATATAACATATTTATGGAGAGATCATAAAAACATAAGCACCAATTAAGTGTGAAATTTGATGAATAGA
TAATAGCAGTTATCCAAAGTGGTTGTCCCAATTAACGCTCCCATTAACAGTGTATGAGAACTCCTTTTGTTTAATATCC
TCACCGAACTTGCTATCGTCAGAGTTTGAAATGTTGTCAATGTGGTGGTTATTAATAGTGTCTGATTATGGTTTTATT
TTGCATTTCCATGATTATTAATATGGCTGAACATTTTTTCCATTTTTTGACTTTTTCGTCTTTGTACAAATTTTGGT
ATCAGATTGTCAAGCCTNCATACACACACACATGCAGAGACACACACTCACCTGTTGAGTTTTTTTTTTTAAAT
TTGATTGTATTATATGTATAAATCAATTTGCAGAGAATTGCTGTCTACAATATTAGGTCTTCTAGTCCATGACCATGGT
TTACCTTTCCATTTTATTTGAAATAAATGAGAAAAAAGTTGCTTTTTCTGTGAAGATTTACAAATCTTTNGTTAGAT
TTGTTCCCAAGTATTTGATACTTTAAAAAAGTATCAAAATTTTCAAAGACTGTAGTACCCATTTCTGTTTTCAACAGT
TACTCAGCTGATCAATGTTGACGTTTAAATCTTTTGTAAATGCTGGTGTGTAAATTTCTTTATAGTGTTTGTTGCTTC
TGTATGGTATAAACTGATTTTTCTGAGTTTTGTTTACAGTGAACCTTGCTAGACTTGTAAATTTCTAAACATTTAGTA
TGATTCTTTGGCATTGTCTACNTATTAGGAAAAAAGCCTTTTGCTTTTCCGTTCCATGGTAGACAGCATCTATATTG
TCCTCAGTGATCCTTGCCCTCCTGGTATTTAATGCCTTGTGTAATTTCTGTCTTGGTGTGGGTGGAGCTAAAATGAC
ACATTTCTAAATAATAGAATATATCATCAGTGATGGGTATCACTTCTCAGATTAGATTCCAAAACCTCTGGCTTCCATC
TTGCTTGTCTTCTTCTTATTCTCTCCCTGGCTTGTCTGAGGAAAGCCAGCTGTCTGTTGTGAGCTGCCCTTTTCTCAG
GGCCACAGGCAAGGAACCTGATGTCTCTGGCCACAGCCGCTGGACATGAAGCCTGCCAACAGCTTTACGAGGAT
TTTGGGAAGTGGATCTTCCCTTGGTCAAACCTTGAGGTGACTCTACCCTAGCTGACACCTTGATTGGAGCTTTTGAGAA
ACTCTAAGCCAGAGGACTTAGCAAAGCTGTGCCTGGATTCTTTATTCACAGAACTGTGATATAATAAATGTTTATTGT
TTTAACCCACTTAGTTGAAGAATAACTTGTATATAAGTGACCTAGATACAATATACTTTCCAATCTCCATACCCCTCCC
TCCCTTCCCTTCCGTCCTTCCCTCCCTTCTCTCCCTTCCCTTCCCTTCCCTTCCCTTCCCTTCCCTTCCCTTCCCTT
CACTTTCTTCTTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCT
TCTCAGGACACTGGAGATCTTCAGTACAGCAGTTCCCTGGTTCCTATTTATCTGCTGTTTCACTTTGTACAGTTTCAGT
AAGCCACGCTCAACCACAGTCAGAAAATATTAAATGGAAATATTCCAGAAATAAACAAGTTTTAAATNGTGTGCTGTTT
TTATAGCATGATGAAATCTTGGACTGTCTGCTTTGTCCACTCTGAAAATGACTTATCCCTTTGTTTCATGGATCCATG
CCTGGTAGACCAGGTACATTGTNAATGAGCAGTAATATTTGAAAGGAATCTTTTTTTTTTTTTTTTTTTTTTTTGTAGCA
GCAGATCTCAATAGTGGGCTTAAAAATATTGAGTAAACTATGCTGTAAACAGATGTACTGTTATCCAGGCTTTGCAGAGC
ACAGGCAGAGTAGATATAGTGTATTTTTTAAGGGCCCAAGGATTTTTTGAATGATAGATGAGCATTAGCTTCAGCTTCA
GGTCACCAGCTGCTAACAGGAGAGTCAGCTTGTCTTTGAAGTTTTGAAGCCAGGCATTGGCTTCTTTATAGCTATGAA
AGTCCTAGATGACATCTTCTGCCAATAGAACGCTGTTTTATCTACAGTGAAAAGCTATTGTTTAGTGCAACCACCTTCA
TCATTGATCTTAGCTAGATTTTCTGGATAACTTGTCTGCAGCTTCTCCAGCCTTTGTTGCTTACCTTTGCAGTTTTCAGT
TAATGGAGATGGCTTCTTTCTTAAACCTCATGAACAGGCTTTGCTTGTCTTTCACTTTTCTGCACTTTTCTCAGT
CTCTCTCAGTCTTTATAGAATTGAGGAGTTAGGGCTTGTCTATAGTAGGCTTTGGCTTAAAGGAATATTGTCGCTGG
TTTTATCTTCTGTCTGCACTCAAATGTTTCTCCATTTTCAGCAATAAGGCTGCTTAGCTTTTGTATCGTGTGTGTTTA
CTGGAGTGGTGTCTTTAATTTCTTTCAAGAACTATTCTTTTCCACTCACAACCTTGACTAACTGTTTGGCACAAGAGACC
TAAACTTTCTTCTATCTTGGCTTTCAACATACCTTTCTCATTAAGCTCAATCATTTATAGCTTTTCGATTAAAGTGAG
AGGCGTGCAACTCTGTTTCACTGAACAGAGGCCATTGTAGGGTTATTAATTGGCCTGACTTCAATATTGTTGTGTCTC
TGGGAATAGTGAAAGCCCAAGGAGAGGAGAGTGTAGGGGAATGGCTGGTGGGTAGAGCAGTCAGAACACACAACATTT
ATNGATTAAGTTCTCAGCCTTATATGGGCATGGATTGTGACACCAACAAACAATTACAATAGTAACATCAAGTTCAGT
ATCAGAGATCACCGTAACAGATGTAATAATAATGAAAACTTTGAGTATTGTGAGAATTACCAAAATGTGACTCAAAG
ACATGAAGTGAGCACATTACTGTTGGAATAATGGCACCAAGAGACTTCTCAATGCAGGGTTGCCACAAACCTTCAATT
TGTAATAATATGCAGTGATCTGGATACAATATACAATATAATCTGTGAAGTGCAATGAAACCAGATATGCCTGTGTATAT
AGTGTTCATACTATATAGTTTTCAGGGCCAGGCATGGTGGCTCATGCCTGTAATCCTAACACTTTGGGAGGCCAAGGCA
GGCAGACTGCTTGAAGCCAGGAGTTTGGAGACCAGCCTGGCCAACCTGGTGAAATTCTGTCACTACTAAAAATTTAAAAA
TTAGCCAGGTGTGGTGGCGGGCGCTTCTAGTCCAGCTACTCTGGAGGCTGAGGCACGAGAATCACTTGAACCTGGGAG
GCAGAGGTTGCAGTGAGCCCAGATCACACCACTGCCTCCAGCCTGGGTGACAGAGTGAGACCCTGTATCAACAAAACA
AAACAAAATATATGGTTTTCAGGCACCTATGGAGGTCTGACATATCCCTAGCAGATAAGGGGGAGTTAGTGTTTAATGT
GGAATAGAGTGGGGATCGCAGCAGCATCATCTGCTCCTCAATTTCAAAGAGGAGGTTTTAGCATAGATTTTGTAG
ATACCTTTTATAATTTTAAAGAAGTTATTTCTATTTCTATTTCTATTTCTATTTCTAATAAGTTCTATCTTTTAGTCTATCAT
ATAAGTTGATGTTGAATCTTAATCAACTACCTTTCTTCTATTTGAGGATTTTATAAGTTCTATCTTTTAGTCTATCAT
GGGGTTATATTACATTAATTTGATTACTAATATTAAGCCACTTTGCATTTCTAGGAGTGGCATAAATCTAATTTATGATGTA

Fig. 6.8

14/375

TTATCATTGGAATATATATATCTAGATTCTGTTGCTAATATTTAGTTTATAGTTCTTGTATCTATGTTTCATGAGTAAAA
 TTGGCCTGAAAATTTCTTCTCTTACTATCTTTGTTGACTTTCTGATCAAGGTTATAAAATTAAGCTGAAAATTTACTCTC
 TTTTCTATATATGGTTGGAATTTTCTTCTTGAATCTTGGGTGAACTTAGTTAACTTTTAAAAAATAAATAATGT
 AATTACACCGAAGTCAGAAAAATGGTTTGTATAATTTCAAGTCTTGGAAATTTGTTGAGACTTGTTCATAGCCTAGTA
 TATGGTCAATTTTGTAAATATTCTGTACACATGAAAAGAATATGAATTTGCATTGATTACAGTTTTTCTCTCTCT
 ATAAAATCTTGTTTAAATTTCTTACAATTTTACTGATTATTTTGCCTGCATATATATGTGTGTGTGTGTGTGTGTGTGT
 TGT
 CTGGAGTGCAGTGGTGCAGTCTACAGCAGCCTTGGCTTCTGGGCTCAAGTGATGCTCACCTGTCTCAGCCTCCC
 AAGTAGCTAGGACTAATTATGCTCAGCTAATTTTATTCAAATTTTATAGAGATTTTGTCTTGTCTGTGCTTGTACCCAG
 ACTGGTCCCAAACCTCTAGTCTAAGTGATCTTCCCACCTTGGCTGCATTATATTTATTATTGAGAGAATTATTATAG
 ATTTCTGATTAAATTCATTTTGAATTTTCAATTTTATCTGGTGGACTGACCTTTTATTTATCATTATAAAATGTCATT
 CTTTATCATTAGTAATGTGTTTGTCTGTAGTCTTTCTGTATTATTTTAGGTGTATCTCTTATAAACAGCATGTAGTT
 TATGTTTAAAGAAGCCAGCTTACAGTCTTTATTTTAAATGTAGCATTTAGACAGTTTATATTTAATACGATTACTCT
 AATTTTGGGTATAAATCTACTCTAATTTTGGGTAAAAGCACCTTTACTGATGCTTCTAACATTATCTTCACTTTCTTG
 CCTTGTGTTGGATTTTGGAAATAATTTTATGTTTCTCTGCTAATTTTGAACCTTATGCAGTGTTCAGTCTTCTTG
 TTGGATTCCCTAGGAATTATGTCTTTTATACTAACATATCAAAGTTTAAAGTTAGTCAGTATCTTTTCCCTCATCCCAG
 ACTATTTAGGGACCTTAATGCAGTAAGAACACCTTCCAATTAGATATTTATATAATGTATTATGCTTTATTGCTTTTT
 AAACCTTCATAATATATTGTTGTTATTTTATATAGTCTTTGTTTACTAGACTTACCCATGCATTTTACCACCTTTTTTCT
 TCTTAAAGTAAATCTTTTAGAATTTATCTGCAGTAAGGGATTGCTTTGTTTTGTCTGAAAACCTTTTTTAAATTTTGGCC
 TTATCTTTTTTAAACAGCTTTATTGAGATATAAGTCACATAACCATAACAATTCACCCACTTACAATGTATAATTCAGTGA
 TTTGGGGTATGTTACTTTTTTTTTTAAAGTTGTGGTAAAATATATATGGCAGAAAATTTGTGTTTTAGCCATTTCAGTGTAC
 AATTTAGTGTAAGAATGCCATCATTGTTTAAAGATAGTTTAACTGTAAGTTATGGACTAAATATTGTCTCCCAGAA
 AACTCATGTGTTGAAATCCTAACCCCCAAAGTGATGGTATTAGGAGATGAGGCCCTTGGGAGGTGATTAGGCCAAGAGA
 GTAGACCATGAATAGAATGAGTGCCCTTATAAAAGAGAACCCACAGAGCTCTCTTGGCCCTCTTCTATCGTGTGGGGAT
 ACAATAAGACAGTCAGTACTACAACATGGAAGAGAGCCCTCACCAGAAATGGACCATGCTCACACCTTGATCTTGGAC
 TTCCAGCCTCCAGGATTATGAGAAATAAATTTCTATTTATAAGCCACCCAGTGTATGGTACTTGTATAGCAGCCTGAA
 CTGACTAATACACTGTGTATAGAATTCTAGGTTGATAGCTATTTTATTTCCATATACTGCAGTTATGCCTTTGTAGCT
 GGCTTCCATTACTGCTGTTTAAAGTCAGCTGCCACTCTAGATATCACTTCTTTATCAATAATGTGCCCTTTCTTGGC
 AGGCTGCTTTTCTCTCTGTCTTTTCTGTTTCTTTCATTGATGTTGCTATATCTTGGTGTGTACTTTTTAAATAATTATCC
 TGCTTGGGATTTCTTGAGCTTCTTGAATCAGAAGTTTGAGGTCTTTGTGCTAGTTTAAATATTGCCCTTTGTGACAATCTC
 TCCTCTGCTTTTGAATCTTTAATTAAATATATGTTAGCTCTCACTCTGTCTCTTAATCTCAATGTATGTCTGTATTTN
 GTGTTTCTATGCTGCTTCTTGATAATTTCTTCAGAATGTTCTTATATTTTCAAGCTTCTAGTCTCCTGTTCAATTCAT
 ATATCCACTATTATGGATTTTACATTCATTTTACTGTCCATTTTACAGCTCAGGAACTGAGGCTCAGTCAGGTTGTGT
 AATATNCCTAAGATTACTCAGCTTGCAAGTAAATAGATGGCAGTCAAAAACAAGCACTGTCTAACTGCAACCCAGGC
 TCCTGACTAATGTGTTTCCAGTGAGCAATGTTTATGGTTTTTAGCACATTTACTTTGGATCTTATGTATAAGCTCAT
 TTGTCATTTTTTCAACCTATACTTTAAAAAATTTAAGATCTCAAAATTTCTTTTTGATTTGCAGCATTTTTCATTGTCTTAA
 CCAGCTTTGCCAAATTCATTTCCAATTTCTTTTGGTCTCTTCTACAAATATATGCTAAAGATTTTTCATCGAATTTTC
 CACAAATTTCCACAAAAGATACTGCAACAGTGATGAAAACAAAGTCTTCTTTGATGCTCTATAGACATAAGCATGTAT
 TTGTTTTATTTTATAGGTATGATTTTATAGTATTTTTCATTTTATGTATAATTGCTTTTATTTTATAGGTATGATAAGT
 CAAAATGTATAGGGAGTATCATTGCCCTAAGAGACTCTGGTAAGAAATTTATCAAATGAATTCATACAGAAAAT
 TTTGAAAGAGTACTACAGCAAAATTTCAAGTTGAAGACACTCTGTATAGCAGGGTGATGGAATTCAGCCATTTCTCA
 TTTTATTTTCTCACACGTCTTTGTGTTCTGCTGATCTGCCCTTCAAGGGAAGTCGTGTCTGGGAGCTTAGCAAATTTAATAG
 ACATATGGGTACGACTTAGCACTTATGTTATCCAAGAGTTTGGTTTTGATTCCACATATAGAAGAGTTTCTGCACAT
 TGTTATAGGAAATATAACTTTTTAAAAAGCTGATGTTTGTGAGCTGCTTGTGTACAGGAAGAAGAACTAAAAATGTCTT
 ATGTTTGGAAAGTCACACAAATCTTAAATCATGATTAAGAGAGGAATCAGTTAAATGGTCCCTAGTTATATGGGTGTG
 GCTGTGGTAAATCATTACTTTTACCCTCAAGAACAAAACCTATATATGTCAAAGACCTAGGGAAAAGTAAGAGTTTTTA
 TTACCTATCAAAAATCAGTATTTAGGAGAGATTCAACTGTATTTATATTCATCATCATAGTATTTTGAAGTACTCACTT
 CAGCATGAAACATAGGAAATTTCAATTTTACAGCATTTGCGATCGTGCCTTTTCTTGTCTTAAGACAATATAACCTGCAG
 AGTGTAATACCTTGACATCACTGGGTCTTCCAAACAAGTTGCCGTAAAACATAAACTATGATTAATTGAGTCTTAAAGAA
 ATTATTTGCTCATGGGTACTCAAGTGATTGAAAAGTTGGGATCTAAGACCACGTTAATGAACAGAAATTTGCTACTTTGT
 ATCAACTTGGAAATATATTTCTTATTTAATTTTGTAGAACAAATATACTTCTGGGATAAGTGGAGGATATATTAAGTA
 CCCTCTGATGAATTTTTTTCAGTGTCTAGTTAACTTAACTTTTAAATTTTCAATTTGAAGAAAATAAAGTGGGAACAGTAA
 TGGGACAACAGGGTGCTAACCCTAATAAAAAAGTCACTTTTCAAGTTTGTAGTGCATATTTATGTTGCAATGTAAGTTTC
 ATAATTAAGTAGTGAATCTAAGTTAAATTTCTGTTTACAGTTTTTGCAAAATTTACCTTGGAGAATTTGTTGAGTGAATT
 GTTTGCTTCATTTGAGGATGTAGAATAAATTTATATTTTCCATAAAATGTACCAACAGTGCTTATTTCCAAACAAAAAA
 TAATTATGTATGTGGCTAGGTCTACTCACTTTGTAATACCTCTTTTGGGGCTCTTCTGTGCAAGTGTGAGACACTTACA
 GTATCTAGAGCCTTTCTAGGGAATATAACAAGGCTTTTCTCCCTCTTCTAGCCCCACAAATTTTCACTCTGTCTGC
 CAGCGTATCTTTTCAAAAATAAACAAGGTACTTCTTGTAGTAGTTTATAATGGATTTCTTTCTATGTTTAAATAAGCA
 AATGAACTTAATTTTAAAAAAACTAGAGGACTAAAAATTTATTTTCATGAGAACTAAGTAAAAATAAATTGATATTTG
 TATTAGTCCATTCTCATGGTACTATGAAGAAATACCTGAGACTGGGAGATTATATAAGAGAAGAGGTTTAACTGACTCA

Fig. 6.9

15/375

CAGTTCGTCATGGCTGGGGAGGCCCTTAGGAACTTACAATCATGGTGGAGGTGAAGCAAAACACATCCTTTTTCACAAG
GCGACAGGAGAAGAAGCGCCGAGCAAAGGGGAAAAGCCCCCTTATATAACCATCAGATCTTGTGAGAACCCACTATCAT
GAGAACAGCATGGGGATAACTGCCCCCATGATTTGATTACCTCCCACTGGGCTCCTCTCACGACACGTGGGAATTATGG
GAACTACAACCTCAAGATGAGATTTGGGTGGGGACACAGCCAACCACATCAATATTTAAATTTGAAGTACTTCAGTTTTG
ATTAGTGTAGACTAATACAACATGCGAATGTAGAGGCCTTTTGTCTACTCTTCCCACTAAGAAGCTCAAGACCTTTGAAG
GGTCTTGACAACAGACATTTTCAGTGATAATTTACCAAGATAGCAGAAGTGTGTTGCTAAAAATAGTTATGTCAGGATA
AAATGCAATCTATAATTTTATGAGAACCTGTGATTCTAGTTTACCTCCAATTACTAATATCCATATCTATGTTTGTATA
TTTTTTAATCAGGTGTGTTTTGGACTCAGAAGTTATTAAAAATTCAGTCAAATGATGGGAGTGATGTTTTGAAGATTAG
AATCATGTAGCTGATTCACATGCGTTATTAGACCATGATAAGAAGCACAGAGGAAATATAACAAATGAAATCAGCCTTC
TTGCCACTGATTTCTGCATAATTTTAAAAATTAATTTGGGTTTTTGTCCATATGCAAATTTGTCTAAAAATTTCCAT
CTTTTGAAAGCGTTTTGATACCTAGAAAAAAAATTTAAGACTTTTCTAAATAGAATATACAAGATGGTACAATCTGAT
TGGATAATAATGCATCAGTGTTCTAAGTTAATAATTGTCTAAGGCAATAATTAAACATTTAAACATGCAGTGACATCAT
TTCTGAATTTTTTCTACTTTCTACTTATCAAAATGCCAAATATAATTATACACAATTACTGCTTAAAGATGATGAAGG
TTTTGATTTTCAGAAAGTTTCATCACTCTTACCTTTTTCAGAGAAATTTAATTTGATGATCTATTAAAGGCACAACAGGTGT
CTGATTTAGCATATTTGACTATTTTCACAAGTCACAATCCATCTAAACAAGGACAGATGTTCCAGTAGAGGTCAGTCTT
GTGTTGATAGTTATTGTATCATAAAGGAAAACTAGGGATTTTATGTTTAAAGTCCAGTATATTTGATATAGTAGTAAG
CCATTAATTTGTGGAAGAAAGAACTTAAAGATTGGTCATCTTTATTGTAACAAAAATTAAGTGGGTAATATTTTGGGT
CCTTTATTACCATATGTTTTCTCCTCAAAACCCAGAAAGCTTAACTGCTTGCTAAATACTCCCTAAAGGAACTTACC
TGAGTAAATGAACAATTATCTAAACGTAGCAACAGATAATTTGGGATAAATGTCAGATTATTGGATTGAACTGAAA
ATATTTCTTGCAAATTTTCAGTTTGAGAAGAGAAACACAGAGGTAGGATAATTTACGCATCAGCCCCCTCACCTTAGCTG
TCTTCTGCAATATGGGGACAACGTGTGCTTGTCTCTTCTCCTCAGATAAATCTTGTTTTATTCTCAGACTAATGTT
TTGGTCTATAAACCGAGAATTTTATAATAAATGCGGAGATGGCAATCGGAGATAAAGCATATGTTTACAAGTAATGCCT
TTGGAGTTGTTGATGCCAAAATACAATAAGCAGTCAAACCAGCATAGCCCAGGAAACATCTTTGAGGTTACTGAGATGA
TAAATGACTTTACTGCAAGGTAGATGGTGTGATGGAAAGAGCAGTGTGTTAGCAGCAGTGGTTCTGCCACCAGATAGCTT
GAGGAGGCTTTAATTTCCACACCTTAAATAAACATAATTAAGTAACTGTGTTTGCTATGCAAATACAGTCTAAAAGC
AAGACTCCTAGTTCCTTCTTTTGAACCTAAATATTACCCAAACGGTCTTCTCTATTAGAATTTGTAGCACCAATATTAGT
TAGAAATCAGAATATTTGGATTTTAACTTGTGGCACTGCCAGTTGGGCAAGTGACCTTGAGCAAGTCACAACCTCTCTG
AGATTTGTCTTTTCTCAGTAAAGTGAAGGGATGGATATGGAAGGAACAACTCCAGTGTTTTCCAGGACAGGAAGAT
ATTAGAAGTTGCTGAGAAATGGAGGGGTGAGTGGAGAAATGGAGATGGTGAGACCTTACAATAAGGTATCTGATAGAAACA
AAGTGTGTAATGCTCTATGTTGGCCAACTTATGCTTTATGTAGAGGTGGGCAGACAGATGTCAGGTAAGAAACCTGGGA
GAGAGGTGCCCAGTTACAAATGCAAACTTCAACTCTGGTCTTCTGTCCGATGATCTGGAGTTCTTCCCACTTCGCCAC
ACTAAGTCTTGTGCTGACAGGAGTGTGTGGGCTTGATCTAAGCAAATCTCTGAAAGAGAGGGCTTATATTTGGTTCCC
TTTATCTCTCATCTATGCCCTTCTTTATTTTTTGGGTCCCTTTCTCTTTATCCACTACATCCTTAGTTGTGCTCAGGT
GTTTCTGAGCATGAGCTTTGTAGGCGACACATTTTCAGGAGCTGAAACAGCCAGACCCACCTCTCTTTTCAGGCTCC
CCACTATGATGTTGACATTTGCCCTCCACAGAGCTTATACCAGGCTGCATTATGTTTCTTCATGAAGACTAGTTAGCTA
AGCAAGTACTTAGAGCCCTTTCAATTCATTAGTTTATTGTAGAGCTTAACTGCAGATGCTAGGCTGGGCAATGATG
AAGGGAGAAAGACGGCTTTAACTCTGAAGGAGCCTCAGCCCAATGAGGAAAGCAATATGTCTACGTGTAACTCTAGATG
ATGAAATCAGACCCCTGTAGTGTGCAGGGTACACAGAGGAGAGATAATTTTTCCAGGGCAGTGGAGGGATATGCAAGGT
GTTACTGAGGAGCTAATATTCAAGCTGAACCTGAAGAATGTGTCCACTAGTGAGGAAGGCAGGGCAGAGGCATTTTCT
CAGAGGAAATAGCATGAAATAGGATCTGGTGACAACTAGAAATGACTTACCATTCCATGTGGTCCAGGTAATGCTAATA
CTTCAATATAAAGTCTGACATGGCTCTCTGTAAAGGACTGAGTAATAAGGGGATTTTCATGAACGTGTGGCCAGGCAGGCA
GCGGACTTATTTTTAAGTAAGGAGTTTTTGGCACCTGTCAAATAACATCTCCGAGATGGCTTCTTTACATATTCCAG
GTCAGTTGATCCAGATCTCAATGCTCTTTGCAATTTTTGGATTCTTAGTAGGTTGCTGCTACACCATGGTTTTCTCTTTC
CACATTTCTCAGGGCATTCCTGCATTAGTCTGTACTGATGAGTTTACAATGGTTGCAATAATTGTTGGTGTGATGAA
CCTTCTTGCACCTTATGTAAAGAGTGATCCTTTTATTGCCAGTTTCTATTTTTCCATCAACAGCCTGATATTCCATG
CCTCTGGGTCCATAGTGTCCATTTCTAATCACTTTTAAATGAATGTTAGAAGTGGCTTCGCAATGCATTGCTTAACTCTT
GTTGCCTGCAGTGAGATGCTTTTAAATATTTTCTCCACATGTGAACCTCAGTGTTCCTTTAGGTTTTCTTAAATTTCCA
TGTGGTTAATGTCACTACTGCAGGGAGCCTGGATATTTATAGATTTTCCCTTTCACCTCTATCTTCAATAATTTGCTTT
TGCATTCACTGAACACATCCATCACAATAAATGGTCTTTTCTCATTTGTATTGACTTGCATTTATATAAACAGACTT
CCTTTTTATAGTATTATCAATGTTTCATGGCAATTTTTCAGTAGCTTGGGGAGCTGGGTATGAGAGTTGGCACAGAGCTGC
AAGTTTTCAAATGACTCATGTCTATGCTGCTTCAAGCTTTATCATTAAGTCAAGACCAAGTTATATGGGTTTTT
TTCCTTAATTGCCCTCAATATAAAATGAGAGTATTAAATAAGCATCTCTAAATATTCCCAATTTCAATAAATGTTCTT
GATTTGATAGCCCCTTTGTGCACTGAAAGATGTAAATATTCCAATTACATTGTTGACTATTATAGTCAAGTTCAATGT
TATAAACTTGTATAGCTCCTAGTAGAAATAAACAGGGAAGTGAATATATACAGTTTCATATTGATCATTCTTAGATGCT
ATTGCTTTCTGATAGCTCAATTTATTTTAAACAGAGTCTACAATGATGTCAATTTTAAATTTATTTTAAATTTTCAAT
TATATTCTTTTAAATATAAGTTAATTTTTTCTTATCACTGTGTCATGTCATTGGTTTTGCAGATTGTTGGGAAGAATATCAC
TGGCAGGACTTGTATTGCTGTTCTTTAGGCAAAAGCAAAGTGGTCAACCTAATCAAACCTTTTTCTAGCTTGTGGAAGGC
CTCTCAGAAAATATCTTTCAGAAAGTAGCTCTGTGTGCTCAGACCCCTGGAACCAAGTCAATCTGCTGCAACAGAGGCCTG
TGCTTTCTTATTGCCACCCATTTTCACTGCTCAGTGGCCTCTCAGATATTAGTGCTATTTCCATAATTCTAGTTGCAT
ATGCTTTTTTGTCTTACCTATGCCACTTAAATATTGTGACATTTTGGGAGCACTTAAACATTTACTTCAAACTTCA

Fig. 6.10

[illegible]

Fig. 6.11

17/375

AGTATAAAAAATCTGTTGTATAAAATGAGGCTAAGACAACTAAGAAATTGAGGATATTTTGTAAAAATCTGGATGGAT
TCTGCTCCCAAGTAACTTTGCAAGTGACATGAACTTTTTTTATTCCACTTTAAAGAAATTAATTGGTGATGCAAAAAGT
TTTGGAGTAATAAATGGCTTGAATGTTAAGGGAAAAAATACCCAACCCAGCATGATACCCATATACTAAGCACCATTA
GGGAGAAATTATCTTGCTGTCTAAAGAGTAATGAAGTTAATGTCAATCTTGAGAGATAACATTTGATTGAAGAACA
GTCTACAATACCACATCATAAGCTATATCTACAAAAATGGTAATAAGAGCATAGGTATGAGGTTTTAATAAATAATAT
TTTACAACAATCAGTAATATTTGCAGCAATGCAACTAGAGTAAAAAATGCTGTTATTGGCAAATTGACAAAAGAGGTT
TTAGAAATAAAAAATATATTATTAATCTAACTACAGTACCAAAAAATAAATTTGGAAGAATACTGAAGTTTTTCATCTATC
ATGACAGTAGAGATTAAAAAAAATCAAAAAACAACCACCCAAAGCCATGGTGCTATATCAGTTTTCAATTGTAGCTTA
ACCAAATCACCTAAAATTTAGTAGTTTAAATAAATGGTTTTATACAACAATCATATATTTATCTCTCGGGCTCTCTGT
GAGTCAGGAATTACAGACAGATACAGTAGGGATGATGGGTTATTTTCCCACTGTGTATAGAGCCTCATCTAGGAAGACT
TGTAGGCTGGGAATGACTCAACAGTTGGGGGTCTGGAATCATCTGGTGAATCTACATTCACTTGTATTGCAAGTTGATT
CTGCTTATCATTGGAATTCAGCTGGTCTTGCTAAAGCACATACACATGGCTCTTCCATGTGACCTCTGTGTTTGT
GGGCTTCCTTACAGCAGGGTGGGTGCTTACAAGAATAAATCATCTGAGAAAACAGAAAGAGCTGTATTGCCATTT
AGGACCTTGCCTTTGGAAGTCTCACAGCTTTTACTCCCTTTGAGGCTCCATCTTGCTCAGATTCAGGTGGAGGGACCAT
ATACACCACATCTTGATAGGAGGGTGGGTATCAAAGTCACTGTAAGATGGTCATGCAGGATGGGAAATACTATTGTG
GCAGTCTTGGAACCTGCAATCTGTGCACATACACACACACACACTGGGAACAATCTTACTTCTAACTGTATGAACC
TTAAGGATGAAGATATGTAAAGGCCATATTTTTTAACTGAATATCATGAGAAAGTGTTTTAGTTCCATTTTGAAAGA
TGGAATATGAGAAGATGAGTTTATAGAATTGATAAAATTCCTCGTTGATATGGTTTTGGCTCTGTGTGCCCATCCAAATG
TCATGTTGAATTGTGATCCTGAGTGTGGAGGAGGGGCTTGGTGGGAGGTGATTAGATCATGGAGGCAGATTTCCCTCT
TGCTGTTCTCATGATAGTGAGTTCTCATGAGACCTGGTTGTTTAAAGTGTGGCACTTCCCCATTCTCTCACTCTCTGT
CTCCTGCTCCACCATGGTAAGTCATGCTTGCTTCCCTTTCGCTTCTATCATGACTGTAAGTTTTCTGAGGCCTCCAG
CCATGCTTCCGTGTCAGCCTGAAGAACTATGAGTCAATGAAACCTCTTTTCTTATAAATTACCAAGTTTCAGGTGGTT
CTTTTTAGTTTGTGAGAACTAATACAGAAAGTTGGTACCAGAGAAGTGGGGCATTGCTATAAAGATACCTGAAAATG
TGGAAGTGACTTTGGAACCTGGGTAATGGGCAGAGGTTAGAAGAGTTTGGAAGGCTCAGAAGAAGACAGGAAGATGGGAA
AGTTTGGAACCTTCTGGGGACTTGGTGAATGGTTATGACCAAAATGCTGATAGTGATATGGACAGTGAAGTCCAGGCTG
AGGTGGTCTCAGATGGAGATGAACCTGTTGGGAACCTGGAATAAAGGTCACTCTTGCAATGCTTCAGCAAAGAGACTGGC
AGCATTTGTGCCCCGTCTAAAGATCAGTGGAGCGGCTGGAGCCAAGATGGCAGAATAGGAACAGCTCCGGTCTACAGC
TCCCAGTGTGAGCGATGCAAGACAGGTGATTCTGCATTTCCATCTGAGGTACTGGGTTTCATCTCACTAGGGAGTGC
CAGACAGTGGGCGCAGGTGAGTGGGTGCGAGCACACCTGTGCGAGCTGAAGCAGGCTGAGGCATTGCCTTACTTGGGAA
GTGGAAGGGGTGAGGAGTTCCCTTTCTAGTCAAAGAAAGGCGTGCAGATGGCACCTGGAAAAGCGGGTCACTTCCA
CCCCAATACAGTGCTTTTCAGATGGGCTTAAAAAATGGCACACCGAGGAGATTATATCCCGCACCTGGCTCGGAGGGTCC
TACGCCCATGGAGTCTCACTGAATGCTAGCACAGCAGTCTGAGATCAAACGGCAAGGTGGCAGGTGAGGCTGGGGGAGGG
GAGCCCGCCATTGCCCAGGCTTGCTTAGGTAAACAAAGCAGCCAGGAAGCTCGAAGTGGGTGAGGCGCCACCACAGCTCA
AGGAGGCCTGCCTGCCTCTGTAGGCTCCACCTCTGGGGGCGAGGCACAGACAAACAAAAGACAGCAGTAACCTGTCAG
ACTTAAATGTCCCTGTCTGACAGCTTTGAAGAGAGCAGTGGTTCTCCAGCACGCAGCTGGAGATCTGAGAACGGGCAG
ACTGCCTCCTCAAGTGGGTCCCTGACCCCTGACCCCGAGCAGCCTAACTGGGAGGTACTCCCAGCAGGGGCAGACTG
ACACTTCACACGGCCGGGTACTCCTCTGAGACAAACTTCCAGAGGAACGATCAGACAGCAGCATTCGCAGTTTACAAA
AATCCGCTGTTCTGCAGCCACCCTGCTGGTACCCAGGNAACAGGGTCTGGAGTGGACCTCTAGCAGACTCCAACAGA
CCTGCAACTGAGGGTCTGTCTGTGTTAGAAGGAAAACTAACAAACAGAAAGGACATCCACACCAAAAACCCATCTGTACA
TCACCATCATCAAAGACCAAAAGTAGATAAAACCAAAAGATGGGGAAAAAACAGAGCAGAAAAACAGGAAACTCTAAA
AAGCAGAGCGCCTCTCCTCTCCAAAGGAACACAGCTCCTCACCAGCAACGGAACAAAGCTGTATGGAGAATGACTTTG
ACAGATTGAGAGAAGAAGGCTTCAGACGATCAAACTACTCTGAGCTACAGGAGGAAATTCAAACCAAGGCAAGAAAGT
TGAAAACCTTTGAAAAAATTTAGACGAATGTATACTAGAATAACCAATACAGAGAAGTGCTTAAAGGAGCTGATGGAG
CTGAAAGCCAAGGCTCGAGAACTACGTGAAGATGAGAAAGGGAAGTTTGGAGAAAAAAGAAATAAAAGAAATGAACAAAGC
CAGTGATGGAAGATGAAATAATGAAATGAAGTGAAGGGAAGTTTGGAGAAAAAAGAAATAAAAGAAATGAACAAAGC
CTCCAAGAAATATGGGACTATGTGAAAAGACCAAACTTACGTCTGATTGGTGTACCTGAAAGTGACAGGGGAGAAATGGAA
CCAAGTTGGAAGCAATTCTGCAGGATATTATCCAGGAGAACTTCCCAATCTAGCAAGGCAGGCCAACACTCAAATTTG
GGAAATGCAGAGAACGCCACAAAGATACTCCTCGAGAAGAGCAACTCCAAGACATAATTGTCTAGCATTCACCAAGTTGA
AATGAAGGAGAAAAATGTTAACGGCAGCCAGAGAGAAAGGTTGGGTTACCCACAAAGGGAAGCCATCAGACTAACAGCA
GATCTCTCGGCAGAACTCTACAAGCCAGAAGAGAGTGGGGACAAATATTCAACATTTCTTAAAGAAAAAGAAATTTCAAC
CCAGAATTTTATATCCAGCCAACTAAGCTTCATAAGTGAAGGAGAAATAAAATACTTTACAGACAAGCAAAATGCTGAG
AGATTTTATCACCACCAGGCTGCCCTAAAGAGCTCCTGAAGGAAGCACTAAACATGGAGAGAAAACACCGGTACCAG
CCACTGCAAAATCATGCCAAATTTGTAAAGACCATCAAGGCTAGGAAGAACTGCATCAACTAACAGCAAAATAACCAG
CTAACATCATAATGACAGGATCGAATTCACACATAACAATATTAACCTTAAATGGAAATGGACTAAATGCTCCAATTAA
AAGACACAGACTGGCAAATTTGGATAAAGAGTCAAGACTCATCAGTGTGCTGTATTTCAGGAGACCCATCTCATGTGCAAA
GACACACGTAGGCTCAAAATAAAGGGATGGAGGAAGATCTACCAAGCAAATGGAAAGCAAAAAAAGCAAGAGTTGCAA
TCCTAGTCTCTGATAAAACAGACTTTAAACCAACAAAGATCAGAAGAGACAAAGAAGGCCATTACATAATGTCAAAGGG
ATCAATTTCTACCAAGAGACTAATCTCTAAATATATATGCACCCAATACAGGAGCAGCCAGATTTCATAAAGCAAGTC
CTGAGTGACCTACCAAGAGACTTAGACTCCACACAATAATAATGGGAGACTTTAACACCCCACTGTCAACATTAGACA
GATCCATGAGACAGAAAATTAACAAGGATGTCCAGGAATTGAACCTCAGCTCTGCACCAAGCGGACCCAATAGACATCTA

Fig. 6.12

18/375

CAGAACTCTCCACCCCAAATCAAAAAGATATACATTTTTTTTTTTCAGCACCACACCACACCTATTCCAAAATTGACCAC
ATAGTTGGAAGTAAAGCTCTCTCAGCAAATGTAAAAGATCAGAAAATTATAACAAACTGTCTCTCAGACCACAGTGCAA
TCAAAC TAGAACTCAGGATTAAGAACTCACTCAAACTGCTCAACTACATGGAAAAGTGGCAACCTGCTCCTGAATGA
CTACTGGGTACATAACGAAATGAAAGCAGAAATAAAGATGTTATTTGATACCAATGAGAACAAAGACACAACATACCAG
AATCTCTGTGACACATTCAAAGCAGTGTGTAGAGGGAAATTTATAGCACTAAATGCCCACAAGAGAAAGCAGGAAAGAT
CCAAAATTACACCCTAACATCACAATTAAGAAGACTAGAAAAGCAAGAGCAAAACACATTCAAAGCTAGCAGAAGGCA
AGAAATAACTAAGATCAGAGCAGACCTGAAGGAAATAGAGACACAAAAACCCTTCAAAAATTAAATGAATCCAGGAGC
TGGTTTTTTGAAGAGATCAACAAAATTGATAGACCGCTAGCAAGCATATAAAGAAGAAAAGAGAGAAGTATCAAATAG
ATGCAATAAAAAATGATAAAGGGGATATCACCACCAATCCACATAAAATACAAATTACCATCAGAGGATACATAAACA
CCTCTACACAAATAAACTAGAAAATCTAGAAGAAATGGATAAAATTCCTGGACACATACACCCTCCCAAGACTAAACCAG
GAAGAAGTTGACTCTCTGAATAGACCAATAACAGGATCTGAAATTGTGGCGATAATCAATAGCTTACCAACCAAAAAA
GTCCAGGACCAGATGAATTCACAGCCGAATTCTACCAGAGGTACAAGGAGGAACTGGTACCATTCTTCTGAACTATT
CCAATCAATAGAAAAGAGGGAATCCTCCCTAACTCATTTGATGAGGCCAGCATCATCCTGATACCAAGCCTGGCAGA
GACACAACCAAAAAGAGAATTTTAGACCAATATCCTTGATGAACATTGATGCAAAAATCCTCAATAAAGTACTGGCAAA
CCAAATCCAGCAGCACATCAAAAAGCTTATCCACCATGATCAAGTGGGCTTCATCCCTGGGATGCAAGGCTGGTTCAAT
ATATGCAAATCAATAAATGTAATCCAGCATATAAACAGAACCAAGACAAAAACCACATGATTATCTCAATAGATGCAG
AAAAGGCCCTTTGATAGAATTCAACAACCTTCATGCTAAAACTCTCAATAAATTAGGTATTGATGGGACGTATCTCAA
AATAATAAGAGCTATCTATGACAAAACCCACAGCCAATATCATACTGAATGGGCAAAAACCTGGAAGCATTCCTTTTGA
ACTGGCACAAGACAGGGATGCCCTCTCTCACCCTCCTAGTCAACATAGTGTGGAAAGTTCTGGCCAGGGCAATTAGGC
AGGAGAAGGAAATAAAGGGTATTCAATTAGGAAAAGAGGAAGTCAAATTGTCCCTGTTTGAGATGACATGATTGTATA
TCTAGAAAACCCCATNGTCTCAGCCCAAAATCTCCTTAAGCTCATAAGCAACTTCAGCAAAAGTCTCAGGATACAAAATC
AATGTACAAAAGTCACAAGCATTCTTATACACAAATAACAGACAAAAGAGAGCCAAATCATGAGTGAATCCCATTCA
CAATTGCTTCAAAGAGATAAAATACCTAGGAATCCAATTACAAGGACGTGAAGGACCTCTTCAAGGAGAACTATAA
ACCNNTGCTCAATGAAATAAAGAGGATACAAACAAATGGAGGAACATTCATGCTCATGGGTAGGAAGAATCAATATC
ATGAAAATGGCTATACTGCCCAAGGTAATTTATAGATTAGTGCCATCCCCATCAAGCTACCAATGACTTTCTTCACAG
AATTGGAAAAACTACTTTAAAGTTTATGTGGAACCAAAAAAGAGCCCCGATTGCCAAGTCAATCCTAAGCCAAAAGAA
CAAAGCTGGAGGCATCAGGTACCTGACTTCAAACATACTACAAGGCTACAGTAACCAAAAACAGCATGGTACTGGTAC
CAAAACAGAGATATAGATCAATGGAACAGAACAGAGCCCTCAGAAATAATGCCACATATCTACAAGTATCTGATCTTTG
ACAAACCTGAGAAAAACAAGCAATGGGGAAAGGATTCCCTATTTAATAAATGGTGCTGGGAAAACTGGCTAACCATATG
TAGAAAGCTGAACTGGATCCCTTCCTTACAGCTTATACAAAAATTAATTCAAGATGGATTAAAGACTTAAATGCTAGA
CCTAAAACCATAAAAATCCTAGAAGAAAACCTAGGCATTACCATTACAGGACATAGGCATGGGCAAGGACTTCATGTCTA
AAACACCAAAAGCAATGGCAACAAAAGCCAAAATTGACAAATGGGATCTAATTAACTAAAGAGCTTCTGCACAGCAAA
AGAACTACCATCAGAGTCAACAGGCAACCTACAAAATGGGAGAAAATTTTGAACCTACTCATCTGACAAAGGGCTA
ATATCCAGAATCTACAATGAATCAAAACAAATTTACAAGAAAAAACAAGCGACCCCATCAAAAACAAAAGCCAAAATT
GACAAATGGGATCTAATTAACTAAAGAGCTTCTGCACAGCAAAAGAACTACCATCAGAGTCAACAGGCAACCTACAA
AATGGGAGAAAATTTTTGCAACCTACTCATCTGACAAAGGGCTAATATCCAGAATCTACAATGAATCAAAACAAATTTA
CAAGAAAAAACAAGCGACCCCATCAAAAACAAAAGCCAAAATTGACAAATGGGATCTAATTAACTAAAGAGCTTCTG
CACAGCAAAAGAACTACCATCAGAGTCAACAGGCAACCTACAAAATGGGAGAAAATTTTTGCAACCTACTCATCTGAC
AAAGGGCTAATATCCAGTATCTACAATGAATCAAAACAAATTTACAAGAAAAAACAAGCGACCCCATCAAAAAGTGGG
TGAAGGACATGAACAGCACTTCTCAAAGAAGACATTTATGCAGCCAAAAACACATGAAAATGCTCACCATCACT
GGCCATCAGAGAAATGCAAAATCAAAACCACAATGAGATACCATCTCACACCAGTTAGAATGGCGATTAATAAAGTCA
GGAACAACAGGTGCTGGGGAGGATGTGGAGAAATAGGAAAAGTTTTTACTGTTGGTGGCACTGTAAACTAGTTCAAC
CATTTGTGAAGTCAGTGTGGCGATTCTTCAGGGATCTAGAAGTAGAAATACCATTGACCCAGCCATCCCATTACTGGG
TATATACCCAAAGGATTATAAATCATGCTGCTATAAAGACACATGCACATGTATGTTTATTGAGCACTATTACAAATA
GCAAAGACTTGGAAACCAACCCAAATGTCCAACAATGATAGACTGGATTAAGAAAATGTGGCACATATATACCATGGAAT
ACTATGCAGCCACAAAAAATGATGAGTTTATGTCCTTTGTAGGGACATGGATGAAATTGGAAATCATCATTCTCAGTAA
ACTATCACAAAGAACGAAAAACCAACACCGCATATTCTAACTCATAGGTGGGAATTGAACAATGAGAACACATGAACAC
AGAAAGGGGAACATCACACTCTGGGGACTGTTGTGGGGTGGAGGGATGGGGGAGGGATAGCTTTAGGAGATATACCTAA
TGCTAAATGATGAGTTAATAGGTGCAGCACACCAGCATGGCACATGTATACATATGTAACCTGCACATTATGCAC
ATGTACCCTAAAACCTTAAAGTATAATAATAAAGTAAAAATAAAAAAAGAAAGTTTTACATATAAAAAATAAATACATA
TGTAAGATCTGTAGAATTTTGAACCTGAGAGAGATAATTTAGGGTATCTGGTGAAGAAATTTCTAAGCAGCAAGCA
TTCAAGAGATGGCCTGACTGCCTCTAAAAGCCTAATTCATTGTGCATAAACAAAGAAATGACCTGAACTAGAACTTGTA
TTTAAAGGGAAGCAGAGCATAAAAGTTTGGAAAATTTTTCAGCCAGACCATGCAGTAGAAAAGAAAAACAATTTTCTAG
GGAGGAATTCAGGGCTGCAGAAATAAGCATAAGTAACAAGGAGTCAAGTGTAAATAGCAAAAACAATGGGGAAAATGCC
TCCAAGGCCTTCAGAGCAGCTTTGTGGCAGCCCTCCAATCATAGTCTGGAGGTCTAGCAGGGAAAAATGGTTTCATG
GACCAGGCCCAAGACCCGCTGCTCTCTGCAGCCCTTGGGACATGGTGCCTGCAGCTGCTCCAGTTCCAGCTGT
GGCTAAAAGGGGCCAAGGTATAGCTTGGGCTGTTTTCTTCAGAGAGTGAAGCTCCAAGCCTTGGTGGCTTCCAAGGTGA
TTGGGCCCTGTGAGTGTGCAAAAGGTAAGCGTTGAGGTTTGGGAACCTTTGCCTAGATTTTCAAGAGATGTATGGAACCTC
CTGGATGTCCAGGCAGAAGTGTGCTGCAGGGGTGGAGCCCTCATGGAGACCTCTTCTAGGGCAGTGCAGAGGGGAAAT
GGGAAATGTGGGGTTGGAGCCCCCACACAGAGTCCCTCCTGGGGCACTGCCTAATGGAGCTGTGAGAACGGGGCCACCA

Fig. 6.13

19/375

TACTTCAGACCTCAGAATGGCAGATCCACTGCAGCTTGCTCTGTGTGCCTGGAAAAGCTGTAGGCACCTCAACACCAGC
CTGTGAAAGCAGCCATGGGGGCTGTATTATGCAGAGCCACAGGGGTGGAGCTGCCCAAGGACTTGAGCCCACTGCTTGC
ATCAGTATAACCTGGATGTGAGACATGAAGTCAAAGGAGATAATTTTGAAGCTTTGAGATTTAATGACTCCCTTGCTGG
GTTTTGGACTTACATGGAGCCTGTAGCCCTTTGTTTTGGTCAATTTCTTTCTTTTGGAAATGGGAGAACTTACTCAATG
CCTGTACTCTCATTGTATCTTGGAAAGTAACTAACTTGTTTTTGATTTTACAGGCTTATAGGCAGAAGGGACTTGCCTTG
TCTCTTCAAAGAGTCTCATCTTTGTCTCTCATAAAAGATGAGACTTTGGACCTACACTTTTGGAGTTAATGCTAGAAATGA
GTTAAGACTGTTGGGAAGGCATAATTGTGTTTTGAAATATAAGAAGGATATGTGATTTGGGAGGGGCCAGGACAGAATT
ATATGGTTTTGGCTTTGTGTCCCCACCCAACTCTCATGTTTAATTGTGATCTTAAGTGTGGAGGTGGGGCCCTTGTGGGA
GGTAATTAGATCATGGGGGCTGATTTCCCCCTTGCCATTCTCATGAGACCTGGTGTTTAAAAAGTATGTAGCACTTCCC
CCTTTGCTCACTCTCTGCTCCACTATGGTAAGACATGCTTGCTTCCCCTTACCTCTGCCATGATTATAAGTTTCCCTG
AGGCCCTCCAGCCATGCTTCTGTACAGCCTGCAGGACTGTGAGTCAATTAAGTAACTTCTTCTTATACCACTTGTATCCA
GCAATCTCATTACTGGGTATATACCCAAAGGATTATAAATCATTCTACTATAAAGACACATGCATACGTATGTTTATTTG
CAACACTATTTACAATAGCAGAGACATGGAACCAACCTAAATGCCCATCAATGATAGACTGGATAAAGAAAATGTGGTA
CACATACACCATGGAATACTATGCAGCCATAAAAAATGAATGAGATCATGTCTTTGCAGGGACATGGATGAAGCTAGAA
GGCATAATCCTCACCAACTAACACAGGAACAGAAAAACCAATATCGCATGTTCTCACTCATAAGTGGGAGTTGAACAA
TGAGAACACATGGACACAGAGAGCGGAAAAACACACATCCAGGCCTGTTGGGATGTGGGGGGTGAGGGGAGGGAACTTA
GAGGATAGGTCAATAGGTGCAGCAAACCACCATGGCACATGTGTACCTATGTAAGGAACCTGGACATTCTGCACATGTA
TCCCATTTTTTTAGAAGAAATCAAACAAACAAACAAAAAATCATTTCCTTGTAATTTGCTCAGTCTCAGGTAGTTCTTT
ATAGTAATGTAAGAAAAGACTAACATCAAAGGTCACTATTTCACAGTGCAGTACTGGAGTGAAATGTGTTAAGAAAAGA
TTTCTTAACTTGGAAATAGCCATATTGGAGAAATGTGCAACAGATCCATCATTGATGATTTAATTATTAAAGGCTGTT
AACTTTGATTTAACGCTATTGATTGGGATATTTACAACCTCTATGCATAGATGGTGACTTATGAAAACCTGAGAGTGGTGC
AAATAAATCTTCCAGTAGAAAAGAACACTCCAGGGGATATAGTTAATGCAAGACATTAACCAGTTTTATATCTCTTT
TAGCATTTTTTTATTCAGTCATCTTTTTTCAATAACTATAAATACTTCTGCTTCTGCTGTATTCTTTTTTCTCACCTTTT
CTATTTTATTTGGTTCCCATATAATGAGTTAAATAAATCTTTGATACATGCTTACTTTATTTTATATGAGAGTCAGGTT
TTTAAATTTATCTTTTGACAAATGAAAGTCTCAGTGAACATGTACTACATCTTGAAAAAAGGGATGGCCTGGGGCTGA
TAATACTATAAAACAAGAGTTGACAGACTATGGCCCCATGGGTCAAATGCACCTTGTAAGAAGCTTTTATTGGAACATAG
ACACACTCATTGATTATGTCTTGTCTATGGGTTTTGTTCTGCTATAGCAGAATTGAGTAGTTGCAACTATGATCATATG
GCCATAAGGCCATAAATATTTATCTGGCCTTTTACAGAAAAATTTTGCTAAATTTCTGTTATAGGAAATCCTGAAT
TTTAAGACTAATCATGAACATAATTTGTTAATCGTTCTCAGAAAATTGACAGCACTAATGATTTATAAGACATCAAACA
ATAGAATATTTAATTTGATTTACTAGAAAATTATGAATAATGCAGAATAATATATACTCTGAATTAAACTTATTGATCT
CAATTTGGAAAACAGAAAACAATGAAGAGATATAATCAAATCTAGAGCCAAAAGTGGCCAATAACTACCTAAATATTAC
CATATATTAACATCAGATGGAATCAACTGTCAAGAATATAATTA AAAAGGTGGAAGGACTATGCTGTGAAAAAATCT
ATCATCTTAACAACCTTGAACCTATTTTTATTAATGTATATACATTTAGTTTAAATGAAAATATAGTATTTGTGTTATA
TACTTTATTTCTCACTTTTGACTTTTTTAATTAATATGTCTTGATTTTCATCAGATAAGAAGGCATCTGGTGTATTAGTT
TTGTTAATTGAAAAATCTCAACTTTTTTATTGCCCAGCAGGGTAGAGGCTTGCTCAGAAGCTTGGAAGTACCAACATAA
CTAGCTTTTTTTTTTTTTTTTTTGTCTTTCCTTCTCTTTCTCTCCTGCCACCTTAATGTAGGGTGAATGAATTTGCCAC
CTCAAAGCTATCTACAATGGGTGAGGCAAAATAACCACAATATGGGTTTGTACATAATTTGGGAAGGAGTTCTTCTCCT
GTCCCTTCTTCTTTTGGCAATGCCCTCTTAAATCACAGTTGTGTGGTTGAACAGCTCTATGAATATATGAAAAGCCACT
GAATGTGCACTTAATTGGGTGAGTTGCATGGTATGTAAATACATCTTAATAAAGCTGACACCCCAAGAAAATCACAG
GAGAAAAAATCGTACCGAGTTAATGGTATATAATGAAAAGAAAATTTGATGTTTCAAGTGCCTACTGTGTACTAGAAA
CTTACAAATGACAGATATATGAGTATCAAAATCAAAGTGCACAGCAACCTAAAACAGCTCTGTCAACCAGGCTGTAG
TGCAATGGCCTGATCATGGCCTATTGCAGCCTTTGCGAAGGAGCTCAAGGGCTCCTCCCAAGGCTTCCGAGTAG
CTGGGACTACAGGCATGCACCACCATGCCCTGGGCTAATTTTTTTTTTTTTTTTTTTTTTTTGTAGAGATGGAGTTTATCATGT
TGTCCAGGCTGGCCTTGCACTCCTTGACTCAAGCCATCTGCCCATCTCAGCCTCTCAATGTGCTGGGGTTAGAGGGATG
AGCCACCATGTCTAGCATAGAGTTGTATTTCTAGGTTTAAAGTAATTAATTTATGGATCTGCAAGCCCAATAATTTT
TATAAGTTATAATTTTTCTTATTAATATAAAGTATTTCCAGGGACTCTGTGAAGTCTGTTATGTCTGGGCTCACGTA
TGAGGCACACAAGGCAGGCAGTAATGAGACTGCTTTTAATCTGTAAATATATAAGTAAACATTCAAATTAATTCATTA
TTTTAAAGAGTGAGATTAAGAAATGTTAAATGCACTCATTTTAAACAATGTTTCCATTGTGCAAAACATTTTTTGGCATT
ATTTGTCTTTTTTCAGGCAGGAAAACAGTGTCAAACCTTTATAATCATGTCTTATTTCTGTGTGTATGTGTCCACATAA
AGTATTAATTAGCATCATTGCTTGTTTCCAAATGCCCTTTTGTCTGTTTCAAACCTCAAATCTACCATTAAAGGAAAAAA
AAATTCACACAATTGAGAATATTCCAAAGAAATGGGCCCTAATGGGGATCACAGAACCTGATTGGAAGACTGAGACTGAAGA
TCTAGGCTCAGAAATTTGGCATGAATCTTGGCAGTAGGTGACACAGTTTCAGGTCACACCACAAAGCAATCTGGTGTAGC
ATGTCTCACTGGCATGGCCACCATTAGACTTTATCCTCACTAGCACCATTTGGCAATGGAGTGTGTACCCTTCTCTTT
AGATGCACTCATCCCAGGTGGGAGTGTTCGTGCAAGCCAAGCTTATGTGCCATGCACCAGATGTCAGTGGATGGGGGTG
TGTGAATCTGTATTAGTACAGAGCACAGTTTGCCACCAAAATATACACAATGTAGCATTTCACCAATTTGCCATTA
AAATCTTTTACATTAAAGCATTTACTGACATTAAGAAGTGTCTTTGGATTCTTTTATTAGTTAAGGTGAGCATATATTAC
GTTTGTAAATTTTAAAGTCGAGTACATAAATAATTAATAAGAGAGATTTTATTCTTTCAAGTTTCAGGTACAGAGATAGT
CTCTTTGCTTTCGATATAGGGTACACTAGAGAGGGTTGTACACCTCAGTTTCAATGCTCCACACTCTCCAGCAGGGAGCA
TAGAACCTTGACCTTTAGAACATTCCACTTAATGGTGCATAAACCCTGTATGCAGTGTAAAGCTGGTAGGAGAAATCAAGT
AAGAAGAGGAAAGAAATGGCCATAAAATGCCACACATTTCTCTTTCGCCCCCACCAGCCCCCTCCAATCATAAGTGTAG

Fig. 6.14

20/375

CTCCATTGGGCACTCTTTACCTCAACTTAAGTTTCACCTTTTTCTGGTTTGGAAAGGGAAAACACGTTTTTTTTGTTTT
GAGACGGAGTCTTGCTCTGTCAACCCAGGCTGGAGTGCACTGGTGCGATCTCGGCTCACATGCTCCCTCCCAGGTTT
AAGTGATTCTCTGCTCAGCCTCCTGAGTAGCTGGGATTACAGGTGCCCGCCACCACACCCGGTTAATTTTTGTATTT
TTAGTAGAGACGGGATTTACCATGTTGGCCAGGATGGTCACGAACTCCTGACCTAAGGTGATCTGCCCTCCTTGGCCT
CCCAAAGTACTGGGATTACAGGCGTGAGCCACCGCGCCCATCCAACTACATTTTAAAAAAGTTAAAAAGCAAAAAC
GAAACAAAAGTTGGGAAGGCAAGTGTTCTGTTCCATTTCAATTAGGAGGCTGACTCTCTAGGAACCTCTCCTGGTCGCTG
GGACCATGTTTACAAGGTTGAGAACTGTGAGTGTACGGAAACCCAGGGGAAACATTTTTCTCATTTACTTCTCAAAAT
AGAGGTAGGAATAAGGCATGGAAAAATATAAATGAGTAAATATAATCCTTGTTACCTTGGAAATAATTGGTGATAAAGTG
CAGGTGCATCTTATTTTCATTCTATCAAGTCGTTTTCTAATTGGATGTTCTTGAAACAGTGGCTCATTTGCTTGTACTTG
TTCACCTCTATTTTCTTGCTACTATCCTGTTTTGGGGGAGGGCAACTCTACCTTGGGGAACGATCAAATGTTTAGGCA
AATATATCCTGGTGTTATAAGCTCATTAATTTCTTGTCATTTCTTGCACTGTGCTGGGAAGTGCTGTTTGTGGCCCGT
TTTTGCAATGTAGAACCTCTCTTTTGTGAGAGCCATGGAAGTTCCTTATTTGATAATTAGTCTCTTGCTTTTAGGCAGTG
CCATTAAGAACTCCATATAAGCTGCCAACACTTTGTGGATGTGCAGAACCCCGTAAGCTTCTATAGCTACTATTGCAA
GTAAATTTTTAGATGCTTCTGAAGTCTTACCCACTTATCTTGGCGTAGAGGTTCTCAAGCTTCAGCACTGGAGGATCA
CCTGGAATTGCTCGTTAAGACACACATTGCTGGGATCCACCTCCAGGGTGTGAGAGTCAAGTCTGGGGTGAAGCCTGAG
AATGTGCATGTCTAACCAGTTCCCAGGTGATGCTGATGTTGCTGGTTTTGAGACTATATTTTGAGATTAAGAAGTGCCT
TGGATTAAGAGCTGACCTGCGATCTACAGCTCAAATAGTGAAGTAAACATCCTAAAGAAAATGAAAAACCAGTGCAGT
GAGTGATTGAATTACTATTTGTTCAATATCACAGAGAGCATAGTATTACATAAGGGCTTTGGGGAATATTTTAGGTAAG
TATATATAACTCTTGCCACCTAGGATGTTTCATAGTAACTATAAGACAGTATTTTTGTTTTCCAAGTAATTTTAATGATC
CTGTAGATCCTCTTCTTTTTGTATATAATATCAATCTAATAGTTTTCTTGTTAATATAAAAAATGAAATCTTATTTTAC
ACAAGCAGCAAGCAGCTATTTTTTTCAGATTTTCCCCCTATAATCTAAGGGAAAGTTATTTTAAAAATAGAAAAGATGTGG
GCTTCAAAAAAAGCTTTGCAAAATATGTTGCAATAATACGAATGATTTTCAAGTGTGAAATCCATTTGTGAAAGCAGGCTT
TGCTTATATTTTGGGTCTGCTTCTATAAAATGCTCAGATTTGCTTTTATTAAGATCATACTCAGTGACCTGAGGA
CCAGATGGAGGTTATAAGCAGCTCTTTAAGGCTTCAGAGCTTAGCCTAGAGAGTCAAACAGCTCTTTGAACTGGCGTCT
CAGCTCTGTCATTTAGGCAAATTGTTTATTTTCTGCAAAGAACCAGCCTTAGGCTTTGTTGATCTACGTATGTATATTT
GTTTTTATTTATTTGCAATATTTCAATCATTCTGTTTTCTTGACTTTAATTTGCTAGTTTTCTTGAAGCTTGTGAG
ATAAATGCTTAGATCATTGATTATCAAATTTGTGTCTATTCTAATATATATATAATATATATATGATAAGGCTATACAT
TTTCCCCTTAGCACAGCTTTAGTAGCCTCCAACAAATTTTGATGTGCTGTGTTTTTATTATAAATCAGTTTGAATATA
TATTCTAATTTTATTATGATTTCTTGAGCCTATGGATTATATAGAAATATATTTCTTAAATTGTAAACATATGGGGATT
ATTTGATGTCTCTAAGCCGAGATTTCTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTT
ACATGTGCACAAATGTGCAGGTTTGTACATATGTATACATGTGCCATGATGGTGTGCTGCACCCATTAACCTGTCATTT
AGCATTAGGTATATCTCCTAATGCTATCCCTCCTCTCTCCCCCTACGCCACAACACTCCCTGGTGTGTGATGTTCCCT
TCCTGTGTCCATGTGTTCTCATTGTTCCAGTTCCCACCTATGAGTGAGAACATGCGGTGTTTGGTTTTTGTCTCTGCAA
TAGTTTGCTGAGAAATGATGGTTTCCAGCTTCATCCATGTCCCTACAAAGGACATGAACCTCATTTTTTATGGCTGTA
TAGTATTCATGGTGTATAGTATTCATGGTGTATATGTGCCACATTTTCTTAATCCAGTCTATCACTTTTGGACATTT
GGCTTGGTTCGAAGTCTTTGCTATTTGTGAATAGTGTGCAATAAACATATGTGTGCATGTGTCTTTATAGCAGCATGAT
TTATAATCCTTTGGGTATATACCCAGTAATGGGATGGCTGGGTCAAATGGCATTTCTAGTTCTAGATCCTTAAGGAATC
GCCACACTGATTTCCACAATGGTTGAAGTAGTTTACAGTCCCACCAACAGTGTGAAAGTGTCTTATTTCTCCACATCC
TCTCCAGCACCTGTGTTTCTGACTTTTAAATGATTGCCATTTCTAAGTGTGAGATGGTATCTCATTGTGGTTTTG
ATTTGCATTTCTCTGATGGCCAGTGATGGTGAGCATTTTTTCTGATGGGTTGTTTTTGGCTGCATAAATGTCTTCTTTGAGA
AGTGTCTGTTTCATGTCTTCCGCCACTTTCTGATGGGTTGTTTTTCTGTTTCTTGTAAATTTGTTTGAAGTTTCAATTGTA
GATTGTGGATATTAGCCCTTTGTCAGATGAGTGGGTTGCAAAAATTTTCTCCCATTCAGTAGGTTGCTGCTTGAAGTCTG
ATGGTAGTTTCTTTGCTGTGCAGAAAGCTCTTAAATTAGATCTCATTGTCTATTTTGGCTTTTGGCATTGCTCTT
GGTGTTTTAGACATGACGTCTTGGCCATGCCATGTCTGATGGTATGCTTAGGTTTCTTCTAGGGCTTTTATTTG
TTTTAGGTCTAGCATTTAAGTCTTTAATCCATCTTGAATTAATTTATGTGTAAGGTGTAAGGAAGGCATCCAGTTTCAG
CTTTCTACATATGGCTAGCCCGTTTCCCAGCACCATTTATTAATAGGGAATCCTTTCCCCATTTCTTGTTTTTCTCA
GGTTTTGTCAAAGATCAGAAAGTTGTAGATATGCAGCATTTATTTCTGAGGGCTCTGTTCTGTTCCATTGGTCTATATCTC
TGTTTTGGTACCAATACCATGCTATTTTGGTACTGTAGCCTTGTAGTATAGTTTGAAGTCAGGTAGCATGATGCCCTCC
AGCTTTGTTCTTTTGGCTTAGGATTGACTTGGTGATGCAGGCTCTTTTTTGGTTCATATGAAGTTTAAAGTAGTTTTT
TCCATTTCTGTGAGGAAAGTCATTGGTAGCTCGATGGGGATGGCATTGAATCTATAAATTACCTTCGGCAGTGTGGCCG
TTTTACGATATCGATTCTTCCCACCCATGAGCATGGAATGTTCTTCCATTTGTTGTATCCTCTTTTATTTTCAATTGAG
CAGTGGTTTGTAGTTCTCCTTGAAGAGGTCTTCCATCCCTTGTGAGTTGAATTCCTAGGTATTTTATTTCTCTTTGAA
GCAATTGTGAATGGGAGTTCACTGATGATTTGGCTCTCCGTTTGTATTGGTGTATAAGAAATGCTGTGATTTTTGAC
ATTGATTTTGTATCTGAGACTTTTCTGAAGTGTATTATGAGCTTAAAGGAGATTTTGGTCTGAGACGATGGGGTTTTCT
AGATATAAATCATGTCTGCTAAGGACAAATTTGACTTCTCTTTTCTAATTGAATGCCCTTTATTTCTTCT
CCTGCCTGATTGCCATGGCTAGAACTTCCAACACTATGTTGTAATGAGAGTGGTGAGAGAGGGCATCCCTCTGTCTTGTG
CCAGTTTTCAAAGGAATGCTTCCAGTTTTTGTCCATTCGGTATGATATGGCTGTGGGTTTGTATACATAGCTCTTA
TTATTTTGTAGATACGTCCCATCAATACCTAATTTATTGAGAGTTTTTATGATGAAGGTTTGTGAATCTGTCAAAGGC
CTTTTCTGCATCTATTGAGATAATCATGTGGTTTTTGTCTTTGATTCTGTTTATATGCTGGATTACGTTTATGATTTT
CATATGTTGAACCAGCCTTGCATCCAGGGATGAAGCCCACTTGATCATGGTGGATAAGCTTTTTGTATGTGCTGCTTGA

Fig. 6.15

TTCGGTTTGGCCAGCATTTTATTGAGGATTTTTTGCAATCAGAGTTCATCAAGGATATTGGTGTAATAAATCTCTTTTTTTTGT
 TGTGTCTCTGCCAGGCTTTGGTATCAGGATGATGCTGGCCTCATAAAATGAGTTAGGGAGGATGCCCTCTTTTTCTATT
 GATTGGAATATTTT CAGAAGGAATGGTACCAGCTCCTCCTTGACCTCTGGTAGAATTCGGCTGTGAATGCGTCTGGTC
 CTGGACTTTTTTTGGTTGGTAAGCTATTATTATGCTCAATATCAGAGTCTGTTTTTTGGTCTTTTCAGAGATTCAACT
 TCTTCCTGATTAGTCTTGGGAGGGTGTATGTGTCCAGGAATTTATCCATTTTTTTCTAGATTTTCTAGTTTATTTGTG
 TAGAGGTGTTTATAGTATTCTCTGATGGTAGTTTGTATTATGTGGGATCGGTGGTGATATCCCCTTTGTCATTTTTTA
 TTGCATCTATTTGATTCTTCTCTCTTTCTTCTTTATTAGTCTTGCTAGCGGTCTATCAATTTGTTGATCTTTTCAAAA
 AACCAGCCTCTGGATTCAATTGATTTTTTTGAAGGGTTTTTTGTGTGCTATTTCCCTCAGTTCTGCTCTGATCTTAGTTA
 TTTCTTGCTTCTGCTAGCTTTTGAATGTGTTTGCTCTTGCTTCTCTAGTTCTTTTAATTGTGATGTTAGGGTGTCAAT
 TTTAGATCTTTCTGCTTTCTCTTGTTGGGCATTTAGTGCTATAAATTTCCCTCTACACACTGCTTTGAATGTGTCACAG
 AGATTCTGGTATGTTGTGTCTTTGTTCTTATTGGTTTTCAAAGAACATCTTTATTTCTGCCTTCATTTTGTATGTACT
 AGTAGTCATTACAGGACAGGTTGTTT CAGTTTCCATGTAGTTGAGCGGTTTTGGGTGAGTTTCTTAATCCTGAGTTCTAG
 TTTGATTGCACTGCGGTCTGAGAGACAGTTTGTGATAGTTGCTGAGAAGAATGTATATCTTTTGATTGGGGTGGAGAGTTC
 ACTATGTGGTCAATTTTGAATAGGTGTGATGTGGTGCTGAGAAGAATGTATATCTTTTGATTGGGGTGGAGAGTTC
 TGTAGATGTCTATTAGGTCTGCTTGGGTGCAGAGCTGAGTTCACTTCTGGGTATCCCTGTTAACTTTCTGTCTCATGGA
 TCTGTCTAATGTTGACAGTGGGGTGTAAAGTCTCCCATTTATTATTGTGTGGGAGTCTTAGTCTGTTTGTAGGTCTCTA
 AGGACTTGTTTTATGAATCTGGGTGCTCCTGTATTGGGTGCATATATATTTAGGATAGTTAGCTTTTCTGTTGAATTG
 ATCCCTTTACCATTATGTAATGGCCTTCTTTGTCTCTTTTGGTCTTTGTTGGTTTTAAAGTCTGTTTTATCAGACAGCTAG
 GGTGCAACCTGTGACTGTTTTTGTGTTTTCCATGTGCTTGGTAGATCTTCTCCATCCCTTATTTTGAGCCTATGTTGT
 CTCTGCACATGAGATGGGTCTCCTGAATACAGCACACTGATGGGTCTTGACTCTTTTTTCCAATTTGCCAGTCTGTGTCT
 TTTAATTGGAGCACTTAGCCCATTTACATTTAAGGTTAATATTGTTATGTGTGAATTTGATCCTATCATTATGATGTCA
 CCTGGTTATTTTGCTCGTTAGTTGATGCAGTTTCTTCTAGCCTTGATGGTCTTTACAATTTGGCATGTTTTTGCAGTG
 GCTGGTACCGGTTGTTTCTTTCCATGTTTAGTGCTTCTTCCAGGAGCTCTTTAGGGCAGGACTGGTGGTGACAAAATC
 TCTCAGCATTGCTTATATGTAAAGTATTTTATTTCTCCTTCACTTATGAAGCTTAGTTTGGCTGGATATGAAATCTG
 GGTGAAAATCCTTTTCTTTAAGAATGTTCAATATTGGCCCCACTCTCTTCTGGGTTGTAGAGTTTCTGCAGAGATAT
 CCGCTATTAGTCTGATGGGCTTCCCTTTGTGGGTAACCGATGTTTGTCTCTGGCTACCCCTTAACATTTTTTCTTTCA
 TTTCAACTTTGGTGAAATCTGACAACATGTGTCTTGGAGTTGCTCTTCTCGAGGAGTATCTTTGTGGCATTCTCTGTATT
 TCCTGAATTTGAATGTTGGCCTGCCTTGCTAGATTGGGGAAGTTCTCTGGATAATATTCTGCAGAGTGCTTTCCAAC
 TGGTTCCATTCTCCCCGTCACTTTT CAGGTACACCAATGAGACGTAGATTGGTCTTTTACATAGTCTCATATTTCTTG
 GAGGCTTTGTTCAFTTCTTTTACTCTTTTTTCTCTAAACTTCTCAATTTCAATTTTCACTTTTCACTTACTGA
 TACCTTTTCTTCCAGTTGATCGAATCGGCTACTGAAGCTTGTGGATGCATCACTTAGTTCTCGTGCCATTGGTTTTCAGC
 TCCATCAGTTCATTAAGGACTTTTCTACACTGGTTATTCTAGTTAGCCATTCTGTCTAATCTGTTTTCAAGGTTTTTAG
 CTTCTTTGCGATGTGTTTGAACCTTCTTTAGCTTGGAGAAGTTTGATCATGTGAAGCCTTCTTCTCTCAACTTGTG
 AAAGTCAATCTCCATCCAGCTTTGTTCTATTGCTGTGTGAGGAGCTGCATTCTTTGCAGGGGGAGAGGTGCTGTGATTT
 TTAGAATTTT CAGCTTTTCTGCTCTGTTTTTTTCCCACCTTTGTGGTTTTATTIACCTTTGGTCTTTGATGATGGTTAC
 GTACAGATGGGGGTTTTGTTGTGGATGTCCCTTCTGTTTGTAGTTTTCTTTTAAACAGTGAGGACCCTCAGCGGCAGG
 TCTGTTGGAGTTTGTGAGGCTCCACTCTGACCCCTGTTTGCCTGATATTACCAGCAGAGGCTGCAGAACAGCGAATAT
 TGCTGAACAGCGAATATTCTTGAAACAGCAAATATTGCTGTCTGGTAGTTTCTCTGGAAGCCTCATCTCAGGTGGGTACC
 TGGCCATGTAGGTTGTAGTCTGTCTGCTTACTTGGGGGTGCCTCCAGTTAGGCTACTTGGGTGTGAGGGACCCACTTGA
 GGATCGAGTCTGTGCTGCTTCAGATCTCAGACTCCTTGTGGGAGAACCACTACTCTCTTCAAAGCTGTGACACAGGGA
 CATTTAAGTCTGCAGAGGTTTTCTGCTGCTCTTTGTTTGGCTATGCCCTGCCCTCAGAGTTGGAGTCTATAGACGCAGGC
 AGGCCTCCTTGAGCTGAGATGGGCTCCACCCAGTTTCGAGCTTCCAGCCACTTTGTTTACCTACTCAAGCCTCAGCAAT
 GGTGGGGCGCCCCCTCCCCCAACCTTGCTGTCTGCTTGCAGTTTCGATCTCAGACTGCTGTGTGCTAGCAATGAGCGAGGCTC
 CGTGGGCGTGGGACTCTCCGAGCCAGGCNCGGGATATAATCTCTGATATGCCGTTTGTCTAAGACCATTGGAAAAGTGC
 AGTATTAGAGTCGGAGTGACCTGATTTTCCAGGTGCCGTCTGTACAGCTTCGCTTGGCTAGGAAAGGGAATTCCCTGA
 CCCCTTGTGCTTTCGAGGTGAGGCGATGCCCTACCCCTGCTT CAGCTCACACTCGGTGCCTGCACCCACTGTCTTGCAC
 CCTGCACTGTAGCAAAGTTTGAATGTAGATAGCCAGAAGTCAGTCTGGGGGAAAGCAATTCATTTTCAAGCTTGTA
 AAATTGTTTTTCAATTGATTTCTACTCAAATTTGAAATTCTTTCTGTGCTCAACATGTTTGTGATGATGCCATAATATGAGCT
 ACAAATTCACTATACCATTTTTTTCTTTTTTTGCTGGAACATGTATAAAATAGAATATATCTGAATTTCCATGTAGGGCT
 GAAAATGCTGTGTCATAATAGAAACAATATGCCTACATCTCCGTCTCTCTTTCTGTGTGTGTGTATGTATGTGTGAAG
 TCATATGTTTTATGCTTTCTATATATCAGATTATGTTTTAGCATTT CAGAGGCACCTGTGTCTTCTTAAATCCTGTGT
 TTCCAGATGAAATGGCAAACATTATTTCCAGCAATGTGATAAAACAACCAAAGAAAGTGTTCAGTGACCCGATTCTATA
 AAATTCACCAATAAGTCAAATATATGCAGTAAAAATAGTTATTACAAGAGTAGCTAAGAGTAATTAATATGAGTAAGTCTG
 TAGCTTAACACAGATAAGATATCACTTTTAAATGCATTTGCATTTCTCATGGGTGAGGGTTAGCAAATTTCTGACCTGGAA
 ACCAAATCCAGCCTACTGTTTTTATTGTAAAAAAATACATTTTGAACACAGTCTTACCACATTTATTAACCTTACTGTTTAT
 CACTGCTTTTTGTTCTAGAAAAGCAGAGTTGAGTAGTTGAAAAAAAGACTGTGGCCAGGCACAATGTCTCATACCATAAT
 CCCAGCACTTTGGGAGGCCAAGGTGGATCACTAACTGGTCACTAACTCTTGGGCTCAAGTGGGTGGATTTAGTCTTACCCC
 AGGTGTTAGTGACCAGCCTGGGCCACATGGTGAAACCCTGTTTCTACAAAAAGTACAAAAATTAGCCGGGAGTGGTGTG
 GTGAACCTGTAGTCCCAGCTACTGGGGAGGCTGAGGTGGGAGGATGACCTGAGCCTGGGAGGTCAAGTAAGGCTGCAGT
 GAACTGAGATCATGCCACTGCCTCCAGCCTGAGTGACAAAGTGAGATCCTATCTCCAAAAAAAAGAAAAAAAAGAA

Fig. 6.16

22/375

CTGTAATATAAGACCCCCAATGTCAAAAATATTTACTATCTGATCCTTTACAAAAGCGTTTGCTAACTCCTGTCCTTGT
GTATGCTTTGATTTTCATATTAATTATATCTTATGTTATTTATGATACATATATGANATACACATATATATCTAATATGT
TATATATTTAAGAAATTATTCACATATGCCACAACTGTAGATACAAAAGAAGTATCTCTAGGGAAAGCCAAAAACAAACA
TGGAAAGAAAGAAGGCTAGCAGAAGCTTCAAAATATCAAAAACCTCTCTTACTGTGTGGCAATATAAACTAAAACTGAT
GCTCAAAATCATGAAGATAGGAAAAAGAATCAAGACAACCAAAAAATATGGTTAATAAAAAATGAAGACAGAAGACATCA
AGATGTTTATGAGAACCAGGCTCCTTTCAAACAGGGGGGTGAAAAAGGAGTGAGAAGATGTGCATGGCAGTGAAGAAGAA
CTTAATTTGCACACAGTCAACGGGGGGGTGGGCAGGAGGGCCAACACAGCTGCATTTCTACCACATTATTTATTTTGGT
AAGTACTGTCTATCTTTTGTATATGAGCCATATTTTCATTCAACAGTGTTTAATGACTTTTTTCCAAATCATTACTCCATAA
TATTTACTGAGAATCAAAACAGAACTTACAATAGAAAAAGAGATACTTTAATTAGATATTTTGGAAAAAATCATTG
TCGTGTGACAAGACAACCAAGAGTAGTCAGCTAAACCTATAGAAATGAAGTATTTCTAAAAATGTGTGAGACAGCTAAT
TAACACAATATTTTATTTTCTAAAGATCTTGCAGTGTGTGTCTATCTTTATCACCTTTTAAAGTTTGCATTTTATTGT
CACTTTTAAAAATTTTAAATAAATGTCCATTTTGTATCTATCATTCTGTGTCTTTATGTAATAGTATCTAATATTCTAT
ATCTGTATCAAAATATCTGTATGTACTTCATATTCATTTTATCTTATTTTATTTATTTATTTATTTATTTATTTATTTA
TTTATTTTATGACAGAGTCTTACTCTGTCTTCCAGGCTGGAGTGCAGTAGCACAACTCTGGCTCACCACAACCTCCACCT
CCCGGGTTCAAGCAATTACCCTGCCTCAGCCTCCTGAGTAGCTGGGTACAGGCACACGCTACCATGTCCAGGTAATT
TTTGTATTTTATGATAGAGATGGGTTTTGCCATGTTGACCAGGCTGGTCTCAAACCTCTGACCTCAAGTGATCTGCCCCC
CTTGGCTTCCCAAAGTGCTGGAATTACAGATATGAGCCACCACATCCAGCCCCATTTTACCTTAATTTGTAAGAATATA
TAATTATATTTATAATTTTATTCATTTTATATTAATTTTCTATTTCTTAAAGGCTAAATCTCTAGTTTCTTTTTTATT
TTTCAGGTAGAGGATTTTAATTCAGTGAGTACCTGATCATTTTACATACCTAGTCAAATAAATATGAAATTTGAAGAAC
TAAGATTAAGTTTAAAAATTTCTAAGTGCATACAATCCATTGAAGAAAAACAAAAATTTGCTTAAGCAGTTTTTAAACC
TTGATAAGAGGTATCAACATGATTTAAATGTGAAATTAGCTAATGTAAGTAGCAGTTAGAAATGAGATTTAGCTTATAT
ATTTGGAGGTATAATGGAAGTCTGGTGAGGACTCTTTTATGTCACACCAAGAGAAAAATGAGAAAGAAAAATGAGTT
GCATTTTCTGTCATTTTCCAGAAGTGAAATGCTTTGCAACATCCTCAGAAAGAAAGAGAATACATGAGTAATATGAAA
GAAAACCTATATAAAGGATTTAATTTATTTTCCAAATGGCTGGGTGTTTTTTTAGTGCTGCTTTTTTTTTCAAGCAGGAA
TAACCTGTAGAAACTTTTATTTATTTTAAAGGAATGGTTACTATTCTTAGGAAAAAGTGGCAGTAAATATAGTTAA
TAACGGTAATTATAATTTTATAAACTCATTCAAAAGTCTTGATTTTAAAGGCGATAGTAAAAAATATATATCTATTT
ATCTTGTTCCCTGAAAAATGGTAGCACTCCTGACCAGTGCAGAGACTGTTCTCCTCGGCATAATGTAGTGCCTTCAAAGC
CATCATACTTCAGTATTCAATGTCAAAGATTTATTTCCATTTGCAAAATTTGCTTAGAACTCACCTATATTACCTTTC
CTCTTATGACTTATAAGATAATATTAACATCTACATAACAGAATCTCACTCACAGAATGTTTGAGCCACGAAGTGCTC
TGAGACCCTCTGCCTCAACAGCCTCATTATAGATGAGAGAAGCCAGAGAGGTGAGGACGCCTTCCAAAGCTCTAGCA
CTTGTTTCTAGACATGGAACCAGGACAGCCCTTGGCATTTCACCACCATTTTCTGCTTATTATGTGGCATGAGCTTG
TCTTTAACACTGAATTAGAATTATTGCACATTACATTGCATTATCAAGGCCTACCCTTCAGGCAGTCTGATGTAACAG
TCTATTATAAGACATCCGAGAAAAACCATCCACTATCCTTTTCAAGATGTTCTCAAACAATTTGTATTAAGAGCTAATAA
AATGAAACAGAAATGCCAGGTAACTTTTTTAAATAAAGATTTTGTGATTCAATTGGGTTTAAATTATTGGTTTTATTTT
AGCATTACTTTTGATACATTTTCATGAAGTATACAGACAGAACTAAAGCCACATTTTAAAGGCAATTAATAAAACCCAGAC
ATTATGATATAATTTACATACATTTAGATATATTTAAAGTGTACAGTTTCAATTTATTTAGTATAACCACAGAGTTGTGCA
AACATCACCACCATCTAATTTCTAGAACATGTTAGAACCCCAAAAGAACTTCATATTCATTAGCATGTTGCATTCCTGG
CAGCTCCCTCTTGCCACCTGTACCCTCAGTCTTAGGCAACCACTAAACAACCTTCTGTCTCTATAGACTTGTCTATTC
TAGACATTTCTATAAATGGCATCATACGATATGTGGTATTTTGTGACTGGCTCTGGCTTCTTTCACTTAGTATAATGC
TTTCACATTTTATCATGTAGCATTTGTAGTGTCTTTCCCTTTTATAGCTGAGTAATATTCATTGTATGTGTATTCCAC
ATCTTTATTTATCCATTCATCATCAATATTTGATGAATATTTGGATGTTTTCATTTTGGCTACTATGAACAATGCTGCCATG
AACATTTGTGAACAAGTTTGTAGTGTGGCATTATGTTTCCATTTTGGGTACATATCTAGAAATAGAATTACTGGGT
CATAGGGTGACTCTATGTTTAAATATTTTGGGAATTTCCAGACTGTTTGGCAAAGTGACTGCATCATCTTACAATCTCAC
CAGTAAGTATGGCATGAGGATTTCAATTTCTTACAGCCTTGTAAGGAAAGGAAATTTTACAATTATAATTATTTGGCAA
AAATTCATGAATTTTGTGAGCATCTATTTTGTGAAAGGTCTTTTGTAGGTGCTATAATTTTTTAAACACTATCAATTT
TTGTGGAAGAAATTAGAACTTTTCTAAAGGACATTATTTTAAAGTTTATTACTTATTATTTATTAATTTTTATTAATA
CATAATATTGCTATGTATCAGGTACATGTGATAGTTTGTACATGCATACAGTATATAATGATCAAATCAGCATATTTA
GAAATCCATTACCTCAAGCATTTATTTCTTTGTGTTTGGAACTTTTCAAGAACTTCTCTTTTCACTATTTTGAATATG
CAATATATTTTTTGTAACTATAGACACTCTATTTGTGCTATTTAAACACTAGAACTTATTTCTTCCACATAACTGTATGT
TTGTACCCATTAAACCAATCTGTCTCTATCCCCCAGCCCTTCCCAGCCTCTGGTATCTATCATTCTATTCCTACCTC
CATGAGGTCAACTTTTTAGCTCCACATATGAGTGGGAACATGTGATACCTTGTTTTTCTGTGCTGTTTATTTCACTA
AACATAATGACTTGCAATTCATCCCTGTTGCCGCATATGATGAGATTTCAATTTTAAATGGCTGAATAGTATTTTGTG
TGTATATATAACCATATTTTCTTTATTCATTCATCTGTTGATGGACACTTAGGTTGATTTTCACTCTTGGCTGTTGTGAA
TAGAGCAGCAATAAATATGGGGGTACAGTTGTCCCTTTGATTTATTGATTTCTTTTCTTGGACAGAGAGACAGTAGT
GGGATTGCTGGGTACAGATGTTCTATTTTGTGTTTAAAGACACTTTCATACTGTTTTCCATAGTCTGTTGTACTA
ATCTACATTTCCCAAGTGCATAAAGAGTTCCCTTTTCTCCACATAATCACCAGCATGTGTTATTTTGTGACTTTGATA
ATAACCATTTCTAACTGGGGTGAGATGGTATCTCATTTGAGTTTGTGATCTGTATTTTCTGATGATCCGTGATGTTGAGC
AGTTTTTCTTAAACCTGTTAGCCATTTGTCTTTTGAAGATGTTTATTCATGTCCTTTGCTCACTTTTGTAGTGAATTA
TTTGATTTCTTTGCTGTGCAATTTGTTTGTAGTTCTATGTATATTTCTGGATATTAGTCCCTTGTGGAATGAATAGTTAGCA
ATTTTTTCTCCATTGTTTCATGTTATCTTCACTCTGTTGATTGTTTCTTCTGCGCAGAAGCTTTTGTAGTTAATG

Fig. 6.17

23/375

TCGTTCCATTTGTCTATTTTTGTTTTGGTTGCCCTGCTTTTGAGATCTTAGCCATAAAATCTTTGCCTAGATCAATAT
CTTGAAGCATTTCCTCTATGTTTTCTTTTAGTAGTTTTATAGTTTCAGGTCTTGTATTTAAGTCTTTAATCCATTTTGA
ATTGATTTTTATACATTGTGAGAGATAGAGGTCTAGTTTCATTCCTTGCATGTGAATATCCAGTTTTCTTAGCACAAAT
TTATTGAAAAGAATGTCCTTTCCCTCAGTGTATGTTCCCTGGCAACTTTGTCAAATAATGGCTGGCTGTAAATATGTGAAT
TTATTTCTGGATTCTCTGTTCTGTTCCACTGGTCTGTGTATCTGTTTTTATACCAATAGCATAGTGTGTGGTTGCTAT
AGCTTTGTAGTATATTCTGAAATGTGTTAGTGTGATTGCCCTTCAGCTTTGTTCTTTTGTGCTAGTATTGCTGCTATTTG
GGCTCTTCTATGGTTCTATGTGAATTCTAGGATTGTTTTTCTATTGATTCAAAGAATGTCAATTAGTATCTTGATAGGA
ATTGCATTAAATCTATAGCTTACCTTGGGTAGTATAGTCATTTTTAACAATATTAATTGTTCCAAATTCATGAGCATAAT
ATGCTTTCTATTGTTGGTATCCTCTTCAATTTTGTTCATCAGGGTGTAGTGTTTTTGTTTTGTTTTGTTTTGGCTTTT
CATAGAAATCTTTACCTCCTTGGCTAAATTTATCCCTGAGACTTTTTTGAAGTTATAAATGAGGTTGCTTTCTTGGTT
TCTTTTTCAGATAGTTGGTTATTGGTGTATAAAAACACAACCGATTTTTTATATTGATTTGTGTCTTGTAAACATTACT
GAATTTGTAAATCATGTCTGAAGTAGAGACAATTTGGCTTCTTCTCTTTTTTTTTTTTGAATTGGAATCTCTCT
CTGTCTATCCAGGCTGGAGTGTCTGGTGTGATCTTGACTCACTGCATCCTCTATTTCCAGGCTCAAGTGATCCTCCCA
CCTCAGCCTCCTGAGTAGTTGGGACTACAGGTGTGTGCCACCACACCTGGCTAATTTTGTATTTTTCATAGAGACAGG
GTTTCATCATGTTGTCTAGTCTGGATTGAACTCCTGGGTCAAGCAATCTGCCCACCTCAGCCTCCCGAAGTGCTGGG
ATTACAGGCTTGAGCCACCACAACCTGGCTGGCATCCTGTTTTCCAGTTTGGATGCCCTTTCATTTCTTTCTTTCCGGA
AAGAGAAAGTCTGGCTAGGACTTCCAGTATAATGCCGAATAAGAGTGCTTAGAGTAGGTGTCTTGTCTTATTCTAGTT
CTTAGAGGAAAGGCTTTCAGTTATTCCCATTCAGTATGATGTTAGCTGTGGGCTCGTCATATATGGCCTTTATTATGT
CAAGGTATGTTCTGCTATACCTAATTTGTTGAGAGTGTTTCATCATGAAGGGCAGGGTGAAAGGGATTCTTTCTGAAG
GAGGTTGTGTCACTCAGTGTCTGATGAGGATATAGAAGTCAGTGTGTTGGTGAGAGATAGTAATTTGAAGAGGGAAACATT
TACTATAAAGAATTATTAACCTGGCAAAATGTGATAAACTACAAAAGGGGTAAATTGTATGCTAAATAACACAGAAATAG
CAAACATAGGGAAGAGCTGCTACTTCTAGGACTGAGGGAGGATACCCAAGAAAAGAACAAACATGGAAGGGTCTTTCAC
ACCTNAAGGCTGAGATTACAGACCTTGTGGAGAGGGTGGTGTCTGTGGCCCGCAGGATAGAAAAGTTCTTTGAGGTGCCA
CAGGCCAGGCTGGTGAGTAGGGTACTGGCTGTTGGGTGCCAGTGGATCAGCACTGTGGTCAAAAAAGTGCTTCTAGG
GTGCTGGAAAAACCCACTGGAAGGTGGTCACCATTGGGTCTCCTGCATACTGCTGGCAAGGAAATTGCCTGCTCGGGTG
ACAATAAACTCAGTAGGAAGCCCTCACTAGGTGTGGTGGTGAAGTCACTGTAGGGTGACTCTCCCATACACCACTGGTG
GCGGCCACAGGTAAACAAGAACAGGAAGAATCAAGAAGGAATGCTCTTTATTGCTATACCTTGTTTTATTTTATTTT
ATTTATTTATTTTTTTGAGACAGAGTTTTGCTTTTTTCCCTGGGTGGAGTGCAATGATGCGATCTTGGCTCACTGCAA
CCTCCACCTCCAGGTTCAAGTGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGTGCGTCTAATTTTGT
ATTTTCAGTAGAGATGGGGTTTTACCATGTTGTCCAGGCTGGTCTCAAACCTCCTGGCCTCAGGTGCTCTCCTGCTCT
GCCTCCCAAAGGGCTGTGATTACAGGCATGAGACACCGCATCTGACCCCTTACTATACCTTGTAGTGTCTCCCCACA
CTCTACCAGCAACAGATGACATTGCCTGGCTGACCGAGGAGCCAGATTAGTATCGTGGAACAGGGCAAAGAAGGGTGG
ATTTGGAGCGGAGAGGCAATATATTGATAACTGTCTTGGTGAACCTCTTTGGCTTCTTAGCTTCCACATGCACCATTTT
ATATATATATTTGAACTCTGTATAACACAAAGTCAACTCTGTTCTTCAGAGAAATGCAGAGTTCTCACCCCTTTCCCCA
AATGAGGAGACACACAGTTCCAACAGTTATCGTAGTCTCATCTGGCTGTCTTAAATACTCCTCAAATCAAAGTCCCACT
GAATATTCTCTTACCTAAAGGCTAAATTGTAGAGTTTATATTCAACAACCTTTCATAAAATAATGAAGAGAGAAAAAGGA
AAATGGTTAATATATACAAATACACACATATACATCACATGCAAAGAGGAAATACACAAAAGTGTGAGAATTCTCAGTT
TTGTAATTGATTGAGAGGCCATAGTTGGTATCTATGGCTTCCTTCTTCTACTGCCTATTCTGTATTTCCATTGCCCCTA
AATGGTCAAGGTTCTTTATCTGGGGAGTGATCCAAACCTTTCATTTCTCAACAGCCTGAATCCTCAATAATCCTGCCCCC
TCCTTTTGACTCCTGCGGTTTCCCATTAACCTTTATTTTCACACCTTGAGTCCAGGTTCCAGGGAGTTAGCTAATATTGG
AGATGACGCATCTGGTCTGAGGAGGTGTCTGGTGAGATGGCTGTTTTTCCCTTTGGTCTTGGTCTTGGACCTCATAC
ATTGCTGTTGAGCATTGCTTGTCTGTCTACATGGCATATTTACCTCAGGAGGCTCTTTCCACTATCTTCATGTGAT
ACTTGAGGGAGCTGCATCATCAGTTTCTGCTTCCAAAACGCTGGGGTGAGGGGGAAGGGCAGTGGGGTGGGGG
AAGAGGGATCCAGAATCCCTGCACGGACTCCTCTGGCTGGATGCCAGTGCAGCCACTCTCTTCCCCATCTCTGTGCTC
CTTTTCTGGGTGGTGGTAGGGTGAGGTGGGAAATTACTTTCTTGTGGTCTTGGATACCTTGCAGCAAGACATCAGTACAT
TTTGTAGCTTTAAAGGTTTAGTTCTTAGCACTTTGCCATCCTGGGAAATCAATGCCAGCAAAATCCCATAGAACTTGTC
TGCTTTTTGCTTCAATTTACCCGTCCCTGAAGACAATAAAACAAAGAGATGGCATTCTGCTTATAAAAGGGTAGTATAGT
AAAAATGAAGAAAATATATCTCACAACTCATTTCCTATCTTTTAAATAAATAGTGATAGACTTAAAAATAGCTAAGATTG
AAAATGATGCCTATTTGAAAATTTACTAAGTAATTACATTCTAGCAGTTATACATGAGATATTTATTATATATCACATG
TACTATAAATCTAATTATCTGTGGTATAAATAGACATTCTTAATCACTTCTTTTAAAGCATTTTCTCTTGAACCTTCGA
CATTTGAATTGGATTGAGAACACGGAACAAGCACAACTCTTAAAGTGTCAGACATGCTAGATTCTTTCTCGCTCCCA
TGGAAAAAGTAAACACAGCATAAAACACTCATCAATTTTGAAGTTAAGAATGTGCTTTATGTAGTTTATCCTAGAAA
AATCCTCAAGTTATATAAACTTTTAGATTATGAATGAGTTATGGTCATTTGGAGATGGCAACAGAGCAACTGGCAGGTT
CAAGAATTTATACACAAAGGTGAAAGGCTTTTTGAAACAATCAGAGTTTTCTTCAAGTCTAACTTCTGAGTAATTTA
TCTGAGAAATTGTGAGATGACATGCAGGAGGACTTTCAAATCATCCAGTGTCCCTCAATCAATCTGGTTCAAATATG
CAGAATTGGAGGACAGGTCAAGAAAGCAGACGCTGAAACAGGAGGAAATGAAGTCGGCTTATTGTGAACATGACTTTTTT
CCCATCTAAAAAAGATGATAGTTTACATTGTTTTGAGAATTGTGGAGTGGGAGAAGCAGACCAACCTTTCATCTGCT
GAAATATAAATTTCTGGGCACACATCTTCTCATTAATTGTCTCCAATTCCTTACAAAAGAAAAAAACCTTCTTA
CATTTTTTTCTATTATAAATAAATTTTCATAGTTGTATTTACCAAATGTTTAAAGCATGAATGTGGTAACTGGTGAAACA
GCTTAATCTGTGGTGGCATGAAATGATGAAAAATAAATATATTTCTCTTTTTTTTTTCTGTTTTTATCTCCATCCA

Fig. 6.18

24/375

CATCAACTGAAGGGTAGCTAGATGGTTTTGTGCAGAAGTCTGAGTGTCCCTTGTGCCAGGAGATGCTTTTGTACCTAG
 ATCTGTGCTTCTGGAGCTACTTCACTGGATTGATGTTTAGGGAGGACTAGAAAGTTGAAGGGGAGAAGTTGAATCATGG
 AGGATGTTGGAGTGCTAAGATCCCTGAATGTGGTACCTGTAGATAAATACAGTGACTTTGAGACGCAGAGCAAAGACTC
 CAGTGGAGTCTGTTATTCACTGAGCAACAGCGTCACCCACCATGGAATAAATCAGGTTGGGGTGGACAATGTATTTCAA
 GGTCTGTGATTAAAGATTGTGGGACACACCAGCGCCCTTCCATAAATAGATTTCAAGCCTCAGCCTTCTTATGTT
 GGTGGGTGGGGTAGATGGTGGCCAGAGAATGACTGAGATTGGGTTTTCTGTCAACTCGAATGGGAGAGGCTCCTTCAGT
 TGGAAATTAGATATGTAAAAGGTAAAGAAATGTGTTATTTTCATGTACCTGTGGATTGTGAAACAAATTCATGCTCACTAC
 ATTTGTTTTCAAAGCATAAATAGGCCCTGCCTTCTGCCTTATCTACTCTACACGTATAGTATGGAACAGTATGATTAA
 GCCAGTATGATTTGAGCCAGAAGATTAAGTTCCATAAAAAGTGAAGAAAAGTCAACAATTTAACACAAGAAATGTTTAC
 CGACTAACTATTCTATGCCAGGTCTGGGAGTATGAGGAAATAAATGTGACATATCCCTTGAGAAAGCAGAAATAATCCA
 AAGAATTCATACATATACAAATTATTAATTACATCAGTAAAAATCTTTATGATGGGTGTGGCCAGGTCTGGGGCTGGAA
 GGCCACCTCAGCATTGCAAAAGAATTAGTCTTCAGTCTGAAGCTCACAGAATTTGCTAACCTATTACTTTAGGGGGAA
 TATACCCCTGAATATCATTACTTGAAGAAAAAATACACATTTCTTTGGAAGAAAGTAAATCAGAAATCTTGAGGGTT
 CTCTCGAAGAAATCAGACCTGTAGTTCTAACAGTCAACTGACCTTAGTTGAGAATGTTAATGTGCCAGAGAAACAAA
 TGAATGCTCACCTTTCCGAGGAAGACAGTAGAAAATAACCCGCTTGACTATCTTCAGCTGGAAAAAGAACTCTTTTTT
 TTTTTTTTTCTGTGACGGAGTTTCACTCTTGTGCCCAGCCTGGAGTGCAATGGCACAATCTCAGCTCACTGCAACCTC
 TGCCTCCCGGGTTTCAAGCAATTCTCCTGCCTCAGCCTCCCGAGTGGCTGGGATTACAGGCGTGACCACCACGCCCCGGC
 TAATTTTTCATTTTTCAGTAGAGACAGGCTTTTACCATGTTAGTCAGGCTGGTCTCGAACTCCTGACCTCAGATGATC
 CACCCACCGCAGCCTCCCAAATGCTGGGATTACAGGCGTGAGCCACCGTGCCCATTCGAAAAAGAACTCTTTAATCC
 ACTATACCTAACCTTTTACTCTCTCTTTAGATTTAAATGATTAACTTCTGATAATGCTGCAGACATTTTTTTTTTCTGA
 AAGATTTGTTAATGAATGGATTCTTTTGAAGAAGTCCAGGCAAGAGCACAGAAAAACAGAGATTCCAATGATGACC
 AACTGTGAAACATACTATGCTATATAAGAATCCTCTAGAGATGTAAGTGAACACCAAGATCAAAGCACAGGGGACTGT
 ATCAATGCATTTCCCTGCAGAAATAGGACTCTATAAAGTGAAGGGCAAGTAGCATGTGGAAGAGGAAGGACACTGGGA
 AGAGCCCTAACTGCTGACGGGAGAGCCTAGTCCAGCTCTGGTCTTCACTGGTCACTGTGAGATCTTAGGCAAATCACT
 TGCTTTTCTGGGCCTTCATTTTCTCATCTGGAACCTGAGGTAATCGAATTAGACCTTCTTTAAGTCTTAAGATTCCAAA
 ATCTCCAATGCAGGCACATATTAATATTGTACCAGGTAGCCTTTGTCTTACATTGAATTGATGGTATAGTTTGTGCATA
 TTTGTCTCCCATCCAAAGTCTGCAGATTCACTAAGGAAGTCAGTTAAGGGCCAATCGGGGATTTGAAGGATTACAGAG
 CTACAGGAGCTATTCTTTATCTGGGTAAGTCTAAGCCAGAAGATGGAGAAGCTCACCTAAAGGATCTGCCATCAGAG
 GTGTGGGTGGTGTGTACTATGGTGTGGAGAGAGGAGAATGTCTCAGGAGACCAGGTAAGGGTTCTCTATGATGATGAGAA
 CCAACCAAGAGCCTTGGAGGCACCAATGATGATGATTTTCTCTAGTTCTTCAAAGCCAGGAAGTGGGCCATATTGTT
 TTCTTTGAAAGAAAAGAAAAATAAGTGAAGTCTTACAGAATATTTTATAGCAACACACTTCTCTGGATTAATTAAT
 AGTTTTAGAAGATGGAGGTAAAGAGCTCATCTGTATAAAGGTCTGAAGATGCACATATCATCTTGGAAAAAGAGGCT
 GTTATTCCATCATTTCCACATACACGGTTTTTGTACAAATATAATTGAAAATTCAAGTCTTTCAAATAAGAAATACATG
 GGTACTGGAGATTAGGTCACACATAATCAAATTTCTAAATTTCTTTCCAGCAAAGTCTGCCCTACTGAGGTCAGAGTAC
 AAAGAAGAGGGGATGGTAGGCTAAACGCCAAATGAATGAAAAGGGAAGATTTTTCAGGCAGGGAGTCATTAGTCTTGTC
 ACATGCTGCTGATATGAAAGGACTGACCACTGGATTGAGCAACATGAAGGCATGTGACCTCAATACAAGCTTTTCTGT
 GGTGGAATGAGATAAAAGAGAACAGGGAGAGAAGTGGAGTCACCAAGTGAGGACAACCTCTTTGAAGGAGGTTTGTGGA
 CCATTTGTTGTTATACAGAGGGAATGACAGGGGATTTTATGATGAGGGAACAGCTCTGTTTAAAGAACTGGGTGTAAT
 TGCTTTTGAGTCCACAGAGAGTCAAGGTTCTCTGTGATTTAATTATTACAGGAAGAGGCTTCTAGAAAGTTTACACTT
 TCTTCAAAGAAAGTCAGTTTCTCTCATTTGATGCTCTCTCATTTCTAAGTGACTTAATGAAAATTCCTTTCCCACTAA
 CTTGAGTTTTATATACCTTGTATGGAGTAGACATAAGAAAGTCTGTTGGCTGNTTTGGTGCAGGACAGGATCCCACA
 AAAAGAAATTTAGCCTTNTAACCTTTCTTCTTTGACTTTCTGTGATTTTCTTAGTTTCTTAGTGTCTGGTAACAGCTCTGG
 TTCCTTTGCTGTAGTGTGGTGAGCCTCATCTCTTCAAACAAATTTGGTTTACAGGCTGGGGGATGTTGGGCGGAGGGAT
 GAAATCATTGTTTTGCTTCAATGTGCGTTCTCCCTGAGAGGTCTTTCACAGCAAGGGAGTCTGTATTTTGAAGATTAG
 CATGTTCTGTTTCAATGTTGTGAACATTCATTTTAAACCTACTATATTTAGCAGAGGTTTAATTACCCAAATTGGGAAA
 CTAGTTTTTAAACCGTCACCTTCTACTTGGTTAATCAAACAGTCCCTACCACCAGCAGGGGAGACTGGCAATTTAGTC
 ATACAGCCACACCTGGTGAGGGCAACTGACAAAAGCAATTCATTTGCCTGAGTTCAGCATCTTCAGCACCCTACAGCC
 CTGTTGTAGCCCTCTTTCTTTCAGTAAGACTTTCTGCAATATACCCTCTGTGGACTAGGGCTGGGGGATGTGTCTG
 CTCTGATGTCTGTGGGGAGTGTCTTTCTTCCACACAAAAATCGTGATTATATTTTCAAATAAGCACTCAGGAAACA
 ATCTCTCTGTGGCATTACAGATATGTGAGATGTTGAGGAAGTGGGCTGGAATGATGAAATTTCTTGGATTTTTAGC
 AATGTCATTTTTCTTCTTCACTCACTTCTGGAAGGGCCAGTCTGAGAGCTGGGCTGAGGAGTCCAAGGCTGA
 TGCAGTCATGGATGAGTCTGAGGCAGGGAGACCACTAGCAGGAGAATGGGCAGTGCCAACTGGCTTTAAAAATACTCAG
 ATACAAATATGAATTTTGCACATCCATTTAGTCATTTGGCAAATATTTATTGATTGGTTGTGGGATAAGCCATAGAGCC
 TGACACTAGTTTGTGAGAGATACACAGGAATAGGAAAAAATATCATAATAAATGCACAGCTACAGAGCGAGAGC
 TCTGAAGGATCAATTTTATGAGTATGCGTAACGGAACCTGATGTGATTGATCAGTGAAGCAAATTTGGTGCTTGAAGTGA
 GATCCACAGTGGTGCTTCCCAAATTTTATGTGCATATGAATATCTGGGGATCTTGTAAATGCAGATTCCTGTGCTGCT
 TCTGGGGCTTGGGGAGGAGCCTAAAATTTCTGCATCTCTAATAAGCTGCCATGTGATGCTGATGCTGCTGGTACCAAAGA
 TTCTAAAGGACAAACATAACGGAAGCAGGGTTGGGGGAAATAAGTTTACAGGGAGGGAACAGTTATACACAGCAAG
 AACATAGTCTGCATGGTGCTCTTCTGGTCCCTAACCACTGAAGCAAAGGTCAAGTAATGTTCTACCTTCTTCCATGAC
 TAATTGGCAGGATATATGTTCCCTGTAGAGACATTTCCCAACTTTAAGGCTGCTCTTATGTTTACTTCAAATTCCT

Fig. 6.19

25/375

TTTACCTCTTGTAATATTGGGATTTCCATTTAAAGGTCAGACAAAAGATATGTCTTCTACCCCTTCTCCTTAGAATTT
GCCAGAAAACAGGGACAGAAATATGAATTTTCATATTTGATAAACCTTGAAGACTAACTCCCAAAAGATAATATTTGGAG
AGGCTCTCAATGCAGTGAAGATCAAATATGGGTGCACAAAGGCTCCTGGAGGGAGTGCTTGGGAACACAGGTCTCAGAT
AAAGCTGGCAGGAACTGTTTTCTTAAGTAGATGGCACTTTGAGGGCAAAACCAACCACCCCTTCTTCGGAATCACAGG
AAAGGCAGGTACATGGAGGGTAGGGTTGGAGCATCCCTTTACCGCATTTGACCTCACAGGAAAGTGGAGCAAGCAGAAC
TGCAGAAAATGTGCAGAAATGCTGCAATCAGTCTGTGTCTTAGTGAGGCAGGGTGGAGGAGAGAGGCTGAATTGCCTCC
TGCTCTGTAGCTGCCAATGCCTGTTGGCTGGAGAGAGGTAAAAATTCAAACAACCCGCACATATAGTCTTGTCTCATG
AGTTTGTCCCTGAACCAGGGAGAATTCTTGCTAGCCTGGAAGTCTCATCCCTTCTCAACAAGACCTTGGATCACTTC
CAACATCAGGAAGAACACACTTCATTTAAAGATGAGTAACAAAAGGCAACTAGCACAGGATCTATACAAATAANTTAC
AAGACAAAAGGAGGAAGAGGACAGGGGAACATAAAGAATCCTCACCAATAACAAGTTGCCATTAAGTAGAAAATTATGA
CAAAATAAATGTCTATGAACAATGAATTTAATGAAACAATGAAGAGGCTGGAAGCAGAGCAATTGAGAGATCAGGGGAA
ATACTAGCACACCACAGGAGGAAATGAAACAAGAACTTCTGAAGGTGAGGAAGGAAGCAGAAAGAGAAAAATAAAGCTA
CCATGGAAATGCAAGCATACTGTAATAAACACTAAGAAGAAACATGCTGACATCACAGTGAGGAATAGGAGGGCAACA
TTAAGACACATAAACAAAAGATATAAGCAAAATAACAGAAATGAACAAAGTTAGAGTGAAGTCTGGAGATATTACTCAGTAAAA
ATACAGAAAACAAAAGAATTGCAACATATGCATTATTTGTATCTTTTAAAGAAGAAGTCTGGAGATATTACTCAGTAAAA
CTCTTTAGAAAATAAAATAAGACTTGAATCTACAAATGGAAAGGGCATACTGTAGCTCAGAAAAAATTGATACAGAATGA
TCAACATTGAGAGGTATCCAAGTAAACATACTGGCCCTCAAGGCCAATGAAAAATTTTGAATTCAGGCAAAAATAAAA
AATAAGAGTGAAAAATTAGTTGGCATGATAACAAAATAGACTATGTAGTGAATATCAAAAGTAAGAGAAAGGAATCC
TAACATAAATGAGAGTACAACATTTCAACATATTACCATAAAAAGTTTAAATTGTCTAATTCACCTATTGACTCAAATT
TACAAAAAGGGAAATCAAATTATTTGTAATATGTGAGATGCATCTAAACAACGAAACTCAGAAAGGATAATAAAGAT
AAAAATTAGGCAAGACATGCAAGCAAATGCAAAAAAAGAGCAGCTGTCTAACTATGGTTGCATTCAAACA
AAAAACATGAAATAAGACAAAAGGGGAACCTGATAATAATAAGGATGTAACCTACAATGCAGTTCAATATGATAAATA
AATTGGCATGGAAAACATGGTGTCAAAGCTACAGAAAATAGGAATAGGCAGAAATCCTTTAGCAGTAGAAAACTTTAAC
GCTTATCTTTTAACTATGGAGAAATCATATGGAAAAAAGCAAGGATAGTTTTAATAGCTTTTACAACAACTATATACT
ATGAAGACAGATTACACTTTCCCTTTCAAGTATTAATGGAGCAGTTACAAAAATTAACTACATATGAAGCCACAAAGAAA
ACTGCAATGCAGTCGATCACATAGAAATAGTACAGACATTATGTCTATGCAACGCAAACTTCAAATGTTAAAGAGAGA
AAAAAAAATAACTTTACCTCCTGGAAATTAAAGAACCTCTCTATATAATTTTTCAGTCTCATAGAGAAAGTCATCGCT
AAAAATCAGAAATATTTGGAAAGCAACACGAATTAAACACTATATTAGAGACTATGAGATCTTGTACAGCAGTACTT
AGAGGAAAGTTTCACTATTTAATACCTTTGTAACAAATAAGAATTAAATGAATTAAGCATCCAATATCAGAATGTATTAA
GTAAAAATAAAGACAAGGCAGAAATAGAAATTAGTAAAGATAAAAAACAGAAATTAATTAATTTGGAAAAATTTAAAAATGC
CAAAATAAAGTCTATGAGTTGTGTTTGAATAATTTTAAAGTAAAGTGTGTCTATGCTCTTTTTTTGAAATGATAACT
TTTTAATTGTGGTTAAAAATATAAACCTAAATTTGCTATTTTAGCTATTTTAAAAATATACAAATCAATGGCATTAATTA
TATGCAATGTTGTACAATCATCACCAGTACTGATTTCTGAACTTTTTTCATCACCACAGCAACTCTGTGTCTCTTAAGC
AGTAACTCCCCATCTCCCTACCCCTAGCCCTGGTAACCTTCAGTCTACATTTTGTGTCTATGAAGCCTATTCTAGA
TGTTTCATATAAGTGAATAATATAATATTTGTCTATTTTGTGTTGGCTTATTTCACTTAGCATGTATCAGAACTTCAT
TCCTTTTTATGTATGAATAATATCTGTGTACATAACATACCACATCTGTATTATACAATTGATTTTGTATGTGCTC
TTGGATGGTTCTACCTTTTAGCTATTTGTAATAATGGTGCAACACCCATCTTTTTTTTAAAGGGAAAAAGCAGAAATAG
ATGATATAAGAAAAACAAGAATTGAGAAATAATTATAGATAGAGAAAAATTAAGGAGATTATAGGACTTATATGTACCAT
AAGCAAATAAATGTAAAAACCTGGATAAAATATGTAATTTCTAGAAACGATAAAGTTCTAAGGCTGGCCCCAGAAGAGT
TCGAAATCTAAAGAGACCAATTACAATAGAAAAAACAGGAAAGTCAGGCTATCCGCTTCCAACTACCAGGCACAGA
TATTTTTACAGGTGAGCTCTTCATAACCTTAATGACTCAATCACTCTAAAGCTTTTTAAAAATCTTCTAGAAGAAAAGAC
TCTAGTTACTTTTTATAAAGTGGAGGTTACACTGGTGTGAGTATGCCACAGAACCAAAAAATAATAAAGAAAGTCT
AATGCTCTCTGTGACTATCAATACAAACATCTTCAATAGAATACTAGCAACATATTCAGGAGGACAGTAGAATGTCC
TTCTTTTCAGGAAAGGAAGGATAGTTTAATATTAGGAAATCTATTGATATTGTTTAAACATCCTAGTATATGTAAAAAAC
AGTAAACCATATGCCCCGACTCATGGTTGCTGAAATAGTTTGCTATAAAATTAATAATCCATTATTGATTATGAAAAAC
CACCTCATCAAATAGAACTAAATTTATCATTAGTAATAATATTTGTCTTACCTCAAAAGCCAGGTCATGTTTAACT
AGCAAACCATACACTCACATTAAATTGGGACAAAGATGCCATTACCACAACATTATTGAACATTGGCTTTGAGGTGCTA
ACAACTTTTAGATAAGATAAAGAAGAGTGGTATGTACAAGTTGGAAAGGAGGAGGTAAGATAATCATATTGCAAAATA
ATGTAACCTGTGTGCTTGAACCCCAAGAAAATTAAGTGAAGATCACTGCCAACAATAGTAAAGAAAAAATAA
GAGAATTGAGTAGTGTGGCTAGAATAGTCTTTACACACATAAACAAACAATTGGTGCTAAGATATGCAAGAAAGGACTGT
ATGCCCAGAGAAGCTAATTCTACAGATTATATGAAAAATGAAAAAGCAAGAATAGCTAGGAAACATCTTGAATCAGA
ATAGTAATGAGAAGCATGAATGCTCTGATGAACACATATTATAGAGTTATAATCGTTACAGCACTATGGTAGTGGTGCA
CAGATAGCTACATCAATGGAACAGAGGAGAAAATTCATTTTTTTTTGTCAGATCACAGTAAAAATAGCTTGAACCA
CTTTCCTATGTATGTCTATGTAAATTTTACATAAAAAATACATGCACGTATATACTTGCATATACATAGAACAGCTTTG
GAAGTATATTCAAGAAATGTAAACAGTTGTTGGGTGATGGGGTAGGAAGTAGTGTATGTTTCACTATATTTTTTGTGTA
CCTTTGAATTTTGCATATTTGTGGTATTATTTCTTTTAAAGGCAATTTATTTTATTATTTTTTCAAACCCAGCACA
GAATATTAACAAAGTAGATAATACATAGGATGGATATGGAATGATTTGCTTGGATCACTCCAAGCAAGGCATCTGAACT
ATTCACATGGTTGTGTTTGAAGCTCCAGGGTCTAAACACTGTAAGATTTTCGGAGATTTATACCAGATCAGACTCACA
AACATTTGATTTTCTCATTTTTCAAGATTTTTCCCTCTGGCCTTTTATTATTATTAGTCTTCAGTAGAGAGAC
CAGGGGATGGCTTGGATTTAGGGGCTTAACACCTCCATCTTCATCAGCTCCATTAGCTGAAGCTGTTGCTGTTCTTC

Fig. 6.20

26/375

TGAAAAGATCCCAGGAGCTTCCCAATACATATGCAATCTCTGTAAAGCAGTGTGTTTGCAAAACACAGCTGCAAGAAAA
GCCTCTACAGCAAGTATATAAAAAGGTGCTCAATATCCTAATCAGGCAGATGCAAATCAAAACCACAGTATTACCTC
ACACCTGTGAGAATGACTATTATAAAAAACACAAGAGATAACAAGTGTAGCCAGAATATGCATAAAAGGGAACCTTGT
ATACTGTTGGTGGGAATACAGAGGCCATTGTGGAAAATAATATGGAGGTTCTACAAAAAATTAAAAATAAAATCTTAT
ATGAGCCAGCAATCCTGTTTCTTAGTGTAGATCCAAAGAAAATGAAATCACCTCATAGAGATATCTGTGCCCCCATGTT
TCAAAGCATTATTACAATAGCCAAGATATGGAAACAACCTTTGGCTGTCAATAGATGAATGGATAAAGAAATTGTGTG
TGTGTGTGTGTGTGTGTGTGTACACACATACACAATGGAATATTATTTCAGTCTTAAAAAAGGACATCCTGCCA
TTTGTGTCAACATGAATGGACCAAGAGGAAAATTATAATATGTGAAATAAGCCAGACACAGAAAGAAAAATACTACATG
GTCTCACTTATATGCGAAATTAAAAAAGAAACAAAATTCAAAGATGTAGAAACAGAGTAAAAAGGTGGTTACCA
GGGGTAGGAAAAGTGGGGGAGTGGGGGAGATGGAGGTCAAAGGGTATAAAGTTTCATTTATGTAGAATAAATAAGCCTAG
AGATCTAATGTATAGCATGAAGACTGTAGTTAATAATATTTTATTTCATAAGGGAATTTGCTAACAGAGTGGATTTTAG
GTAATTCTACTACACACACACACACGACACAGAAAAGGTAAGTGTGTAACATGATAGATAGCTAATTTGCTTGATGT
GGTAATCATGTCTATTATGCATATTGTTAAATAAAATTTATGGAAGCTCTCATTCTAGATCCCAACAAAGCAAAAA
TGGAGTCCACACGCTAAGTGCCACATGATTAACTGAAATTTTAAGAAAGCAGGTAAATTTCCAAACAGACCAGATAT
TTTTGAAAACAGAAGATTCACAGAAACCAATTAGAAAGGGCCAGTCAGCCTAAGTCAGTATAATAAGGAAATCTCCAC
AGTTTTAACCTTTATAAGAAAAGTAACCTGAAGTAATCTGATGTTAACCGATCTGCCTTTTTCTATTATTCTGTTTCT
TGTTCCTCACTTTACAAAAACCAATTGTTCTGCCATGCCAGTGGAGCATTCTATTCTATTATAGAATACAATACTGCTG
AATTCTAGAATCACAATAGAAAGCCAATTAGATCTTAAACTAAATTTGTTATAGTTTTGCTTTTGACAATATGTATA
TCAAACATCGTGTTAGGTATTGTCTTAGTCTGTTTCTGTTGCTATAACAGAATACCACAAACGGCAATTTATACAGA
AAGAAGTTTATTGGCTTACAGTTCTGGAGGCTGGGAAGTCCGAGAGCATGGTGCCACCATCTGGTGAGGGTCTTCAT
AGTGAAAGGGTGAAGGTGAAGTGAACACTAGAAAACAGAGAGCAAAATGGAGGCTGAACCTTATCCTTTTTATCAGGAACC
CACTCATGGGGCTCTGCCCTCGTGATCTAATCACCTCTTAAAGGGGCCACCTCCCAATACCAATTACATTAGCAATTAAA
TTTCCACATGAGTTTTGAAGGGGGCATTCAAATCATATCAAGAAAAAAGTCAAGTCCCTTAGGCTTCTCTCTCTAG
GTAGATTCTGCTTCTAGTCCCTTCTATATAGAACTCTGGAGTTTCCCTACCTCATACTATTGCCTGTTTTCCATGG
CTCCAAGAGAAAAGGAATATTCTCTTTCTGAAAAGCATACTAGTTTATTGGTCAGCACCAAGTGTGTTAACTT
CAGTTTCAGATGGCAACTCACACATAGATGTGTTTATGTTGCTTATAGTCCCTTATCAGTATTATCATTTGGCAAAGCCTTTGGTAA
GCAACAGAAGTGGCTAAACAGAATAATTCCAGGCTTGAAGTTCCTTTTCTGTTGCTGTTCCCTCTGGGAAAAGGCTATGA
AAGCTAAGGGTGGTGGCCAAGTCCCAAGGCCAAGGTCAACATCAAAACATTTTCTGAGAATCTACCAAAAACACAGGTC
TGTATTAGGTCAATATGCACACAGTTGTGCTGGGAAGGAATGAAGCTTTCAAATATGAGAATCTACCTGAAAAATCTT
TGCCATCAGTTCTTTGAAATGAAACTCTAAGCTGGGAAGAACTCTCTGCTTAGGGGAAGTAGGACTAAAACCTTGACTTT
TGATTTGGAGAACATTCAAAGACTCTAAGCTCATGAGTGCTCAACTTGTAATTTTTTGCCCTTGAAAAAACTATAGGC
GGGTGCAGTTACACCTGTAATCCCAGCACTTTGGGAGGCCAAGGTGGGTGGATCACTTGAGCCCAGGAATTCAAGATCA
GCCTGGGCAACATGGCGAAACCCCGTCTCCACTAAAATAACAAAAATTAGCCAGGTGTGGTGATGCATTCTGTCATGCC
AGCTACTCGGGAGGCTCAGGTGAGGGGATTGATTGAGGCTGGGAGATTGAGGCTACAGTGATCCGTGATGGCACCCTG
TACTCCAACCTGGACAACACAAAGACCCTATCTCAGAAACAACAACAACAACAAGAAGCAACAAAAGGGAATTTGTAC
TTTTAGCCATAGAGCCTTCAAGTTTGTATATAACCCTGGGGAGAAAACCTTCTATTCTACTTCATTCTCTAAATGGGT
TAATCACTGATTATACATAGAAAATTTACTCAAATGAAAACAAACCACCACCAGATTTTACCTTTAAATATATTTTCTT
GGTATTATTTTAGTTCTGTTAGCAAAAAGGTGCAGAGATAAGGACATGGGTAAATGACATGGGTTATTTATTGCACTCT
GCATACAGCAGCAAGAATGCTTTTCTTAAATTTCTTTTGTGTAAGTCCCTTTTTTGCTTATGTCTCTTTTCTTAAAA
AATCTTTTTTGCTTAAGTCCCTTTGTGTGCTGCCACATCATTGATTTCCCAAGCAAAATATTATAAGCCTGCATTATC
CTGTTTCTCTCTCTCTGTAATCTTCTCTCCTCATCAGCAGATTCTGTTTTCTTTCTTTTGCCAAGTCTGTGTGGC
TAAGAGTAAGTCACTGGAGTCTCACTGTCCCTTTGTCTGTAAGCTATGGTTTTGGAATAAGAAGGGTCTGGCCTGCT
ATGGGGTGTATCAGAGTCAGGGTGAAAAGGTCTTAAGGTATTTGAAAATAAAGCAGCAGATAAGCTTGACATGGAGAGT
AGCCTACCTCTGGCTCTGTTTTCTCCATTTCTTAGGAGTGAAAAGCTGGCCGTGAGCAAGCAGATTCAAGTGCTCACAT
TGTAGCCACATAATCAAAGGAAGAAATACATATCTTTTTTTTTTTTGAGATGGAGTCTCACACTGTCAACCGCTGGAG
TGCAATGGCACAATCTCGGCTTATTGCAAGCTCCGCCCTCTGGGTTTCATGCTATTCTCTGCTCAGCCTCCCGAGTAG
CCAGGACTACAGGCGCTGCCCCACTCCGGGCTAATTTTTTTTTTTTTTTTTTTTGTATTTTTTACTAGAGGCGGGGTTT
ACCGTGTTAGCCAGGATGGTCTCAATCTCTGACCTCGTGATCTGCCCGCTCAGCCTCCCAAGTGCTGGGATTACAG
GCGTGAGCCACCATGCCTGGCTGAAATACGTATCTTTAAGATCTAAAGAAAATCGTTTTAAAGTTACTGTTGTGTCCA
TCTTGTTTTCTTGTTACTGAACTTATTTCAAAAATTTAAATAACATTAAGGAAGGTATAAGATTTTTATGGCTATCCA
AAAGCTGCATTAAAAAAAAGTAACTTAAGGATTTCCAAGTCAATTTCCGGCTGTGAAAATCACACTGTGTCTGAGTT
GGTGGGTTCTTGGTCTTACTGATTTCAAGAATGAAGCCGAGACCTCTCAGTGAATGTTACAGTTCTTAAAGCCAGCG
TGTCTGGAGTTTGTCTCTCTGATGTTTGGATGTGTTTCGGAGTTTCTTTCTCTGCTGGGTTTACGGTCTCGCTGGCTC
AGGAATGAAGCTGAACCTTCGAGTGAGTGTTACAGCTCTTAAGGCCACATGTGCGGAGTTGTTTCGTTCTCTCCCGGC
GGGTTTCGCGTTTTGCTAGCTTCAGGGGTGAAGCTGCAGACCTTCATNGTGAGTGTTACAGCTCATAAAGGCAGTGTGG
ACCCAAAGAGTGAGCAACAAGATTTATTGCAAAGAGTGAAAGAACAAAGCTACCACAGCATGAAAGGGAACTTCAG
CAGGTTCCCACTGCTGGCTTGGGCAGCCTGCTTTTATTCTCTTATCTGGCCCCACCCAGCTCTGCTGATTGGTCCATT
TTAAAGAGAGCCGATTGGTCTGTTTTACAGAGAGCTGATTGGTCTGTTTTGACAGGGTGCTGATTGGTGGTTCATTA
CCCCGAGCTAGACACAAAGTTCTCTACCTCCCCACCAGATTAGCTAGATAACAGCATCCATTGGTGTATTACAAACC
CTGAGCTAGACACAGAGTGCTGATTGGTATGTTTACAAACCTTGAGCTAGATACAGAGTGCTGATTGGTGTATTACAA

Fig. 6.21

27/375

TCCCTTAGCTAGACATAAAGATTCTCCAAGTACCCACCAGACTCAGGAGCCCAGCTGGCTTCACCCAGTGGATCCCGCA
CGGGGGCCGCGAGGTGGAGCTGCCTGCCAGTCTCTGCGCTGTGTGCCCCGACACCTCAGCCTTTGGGCGGTGATGGGACT
GGGCGCCATGTAGCAGGGAGTGGCGCTCCTCGTGGAGGCTCCGGCGCGCAGGAGCCCATGGCAGGGGCGGGCGGGCGGG
GGTGGGAGGAGGGGAGGCTCAGGCATGGCAGGCTGCAGGTCCCAGGCCCTGCCCTGCGGGGAGGCAGCTAAGGCCTGGT
GAGAAATTGAGCACAGCAGCTGCTGGCCCAGGTGCTAAACCCCTCCTTCTGGGCCCTTGTGGGCAGAGCCTGCTGAGC
CCACGCCCCACCCAGAACTCATGCCAGCCCAGAACTCGGGCCCCACCCAGAACAAAGCGCCGTGCCAGCCCTGGTTCCCG
CCAGCGCCTCTCCCTCCACACCTCCCTGCAAGCTGAGGGAGCTGGCTCCGACCTTGGCCAGCCCAGAAAGGGGCTCCCA
CAGTGCAGTGGCGGGCTGAAGGGCTCCTCAAGCACGGCCAGAGTGGGCGCCAAGGCCGAGGAGGCACCGAGAGTGAGCG
AGGGCTGCAAGGGCTGCCAGCACGCTGTACCTCTCAATACGATCTGTGAACATGTGCCCTTTCTCAGTTCAGAAAGCC
ATTTAGAGCAAATGTACTTATTTACTTTATCCAGGCTCTGCTTACTCCTCTCCTCTCCACAGCCATCTCCTCCATTAGA
AATGCTTTTTCCCTGCCATTTTTGACAGACCCTGAGCCTCCTGGCCTCCCTGCCTGAGACGCATTATAGTCTCTCTGACC
TGGACCACTGCATGCAGCTTGGGAGCCTCCCTGTCTTTAAGGTATCGGACAAAATATAGATGAGAGTAGCAAGGCATTA
GGAGTAGTAGTAATAGCAGTACAAACAAGAATAAATTTTATGATAATAGTAGCTAACATTTGTTGAACCTCCTTTTA
TGTGCCAAGCATTTTTATGTTTATTATCTTACCACCTTGACAAAGGACCTTATGAGGTGGGTACTATCAACCCAGTTTCT
CAGAAGGGGAAACTGAGGCTTATAAAGAATATACAACCTTGCTCCAAGTGGTAACCTAGTGGAGAGGATTTAAACCTTG
GCTCTTCAACATCCCATACCTATGCATTTAGTTGCTGTTTATAAATAGTCACCTGCATATGTTTCACTTTGCTTTTACC
TGTGTTTATCCCATCTTTTTTGTGAACTCCTGGAAGGCAGGTGCTGTCTTCTTTCATTCTTTTATACCATCTCAGAGG
GCTGTAACAATACATGCTCAGAAAAATTTCTGTTCAACCTGCATGAAGTACAAGGCAGGCTGAAATGTAAAGAAATAC
ATAAATTACACTGAGGAAGAGCAAATCCTTTTATATAACTTTTTCTGGCATTACCTCTTAGGGGAAAAGAATTCTCAA
GCAAGCTGTAAGTGAAGTGGTTACCAAAATCAGAATGAATTTCTCCCAATCACGGGGGACATTCCATAAGCCTTTGGAG
TGAGGTCTATTTTAAGGATTTTGTTCAGTTCTCTTCTTGTTCCTGGCCACACTGCCAGCACTTCAATTGGCTAA
TAGGGATTCTGAATAAGAAAGATACAGGCAGCTCACTTGAAGTTACGTTAAGGACTAATAAAGATCTTGGAGTGATTT
TCAACAAGATAAGATCAGCATCCTGGTATTGAGTTATTTTGTACATTAATTAATTTAGTTTGTCTAATGGTCTTTG
GCCTCCTGCTTAAATGTCAATTGAGGCAACAGATTAATTTCCCTTAAATAGTGGCCTGTGATGCTTGTGTTACTTAGTTC
TGGGTTTTATAAAGTAAGAACTAAGATGGATATTTATCAATCGAGCAGATTTCTGTGTTGTGTCCTCTAAAGCCCTTGG
GGTCAGTGTCTACTGTAGCATCACTAACACCTTTTATGGAATCAAGTGATTAATAAATGTGTCCTCATGAGACTGTGA
TGCTTCTGGGTGTTTCAATTTAGATACCTTAATAATAGTCTCAAGAGTAGCTCAGTTATTAAGTGATTTTGGGGTTGCA
TCATGTGAGGGAAATCAAGAAAGAACTATTTAATAGTCAAAATTTCTCTGAGATAGTGAAGATAAAAGAATGCTA
CCAGTTTACCCACTCCTTACTGTCTGAGTCAGGAAGAAGGTGAACATCTTATCCTTCTTACCTCTATTACCTCATT
TAGAAAATTTTGACTATTTCTTCTTTTAGCTCCCTTTTTACGGTCCACCATTTTTGAAGATGACTTTCTCCCTGTCTT
CTTAGAATAAAAGGTCCAAAGGAAGAAAGAAACAAGATATGCTCAGGAGTTACCTGTGATGACTTCTCTCCCTGTCTT
CGGGCACTGGCCCACTCCTTTTTCTATTCTCAGTTCTTTATCTATTACTTTTTCTATTCCCTGCTCCTTTCTTATT
GTCCTGACTTGCATGACACTGGCAAGCTACAAAATGGGAACAATAGCAACTGCCTTAGAAGGCTGACAGGATTCACGGG
AAGCACCTTGAGCAGAGTCTAATTCCTAATGAGTGGTCCTTACATATTAGGATCATTCTTTCTTTTCTTTGAGCTCTCGG
TTTCTTGGCCTCTGGCCTTAGCCTCTTTCAACATATTCTACATAGGTAATCAGATTCACCTTCAACAATGCTGTTTTG
ATCTTGTCTCTGGTGAAGAAAAAATAAAACCTTCAGTGGCTTTCTAAGACGATGAAATCAAATTCAAAGTCTCATCGT
GGTATTCAAGGTCTTCTGTAATCTCCCTCAGCCTGTGGCTCTTACTGATGCCCCATTCTTCTATTGCTCAGGGTGCTT
TGGGCTGTAGCCACTAGGTTGACGAGCATCCTCTTGACGAGCATCCTGATGATGCTGATAAAAGTGCTCAAGGACATTT
TGGGAATTTTTCTTTAGTGTATCTAGGATAGTACTGTATACAATGCATATTTTTATGTATAAATCTTATTTCTGTCT
ATGTTAGTTGCCCTTGAACAAAACTGGGCCTTTGTATCTGTGCAGGCTACAAAGGCTTGACACTGCTACCCCTAGAAA
GGCCTGCTTGCCAGGTTAGCCTTTGGTTGGTAACTGGGAACCTGAGCCCTTGGAGGGCTCTCAGTCAACAGTCAATTGAT
AAGTGTGGTTTCACTGTGCCTAGACTTTTGTGCAACAACACAGTTTATGCTTGAACACCTGCTCCCCTGTTTGGAGTCT
GGAATATTTTATGTGCTAGGCAGAGGGTGCCATGTGATCAGCTCCATGAAAAACCTTGGGCACCGAGTTTCTAAAAA
GAAGCTTCTGTGGGCTGAAACGTCATATACAAAGTTGCTACATTTTCTTGCTGTACTCTATGTGATCTCCCGTGGTAGG
CAGAAGCATAAGGAAATCTGCACGTAAATCATTAGACNCTGCCTGTGGCTCTCCCTTATGATCTGGCTGTGTATCCT
TATTACATCACTAGAATAAATCTTAGCTTTAAGTACTGCCATACACTGAGTCCCATGGGTCTTCTAGTGTATGCCAAA
TGTAGGGGGCAGGGGTCTTGGGTACCCCTGACACAGTATCTCTTTCAAAAACAATTTCTAGAGTAGGTTCTTAATAAAT
ATTTTGTGATTGAGCATCTCAAATCTCCCAAACATTGTAGATGCTTAAACATTTAAACACTTTTGTCTTTTACCA
TTTTTGATTTTTTGGGCACCTTTAAGTTTTTTTTTATATGCCATCAGGCCAACATTTATAACATATGGTAGATCTGAGA
TGTTGTTTTACTGCCTACAAAGAATTGTTCTAGTTTTGCTTATTTTCTTTTACTTCCCGATATTTTACAGACTGT
TAGATCTTGCCAGAGCAGTTCTTTTGGGCTTTTGTGATACAGAATCACTGGAAAAGGTAGAGGGTTAGAAGGGCACAGG
TTTGAGGACTAGGTCTGGGAGATCAGTTTTGGTGGGAGGGTATGAAGGAGAGAGGCGCATGACAGGGCTTGTGTGATGT
GACGTGACCACATGAAAGGAAGGGGCTTTGTGAATTGTTGCGGCAGACTGAGATTCTTTTTTACAGCATTTGAGAAATA
ACAGAAAGAGAAATTTGTTATTTTGAATGACTTCTTGGCGGCTGAGTTGTTTTTCAATTTGATAACGACCCCTCTCTAATA
CCAAGTCATGGTTTGCAGTTTACGTCCTTAGGGTTTTTACAGATTTTATTTGATGGTAGGAACCATCATTGTTCTAG
ATTTAGCATGTGAAATTTCCAGTAAATTTCTGGTGACAATGACTGATGCTTCAATTCATAAACATTTATTGAATACTTG
CTGTGTGCCAAGCATCGTGTGTAGAGGATACAGAGATGAGCAAAAATAGGTCCCTACTCACATCATAGAGGGGAGGCCG
ACTCACATGCACACATTTCCAATCAGATATGGTGAATACTAGTGGTGGAAGGTAGGAGCCCAGAGGACAGCATCTCAT
CCACTGGGACCTTGCTTCCCTACGAGGCTTGTCTGCATTTTATGGCCTTAAATTTTACCAATGTAGTTATCTAGTGGTG
CTGATAAATCACTTATAATTAGTTTTTTTATTGTCTAAGTATCAATTTTAGCTGCTGTTTTTTTAAACCTTTCTTTAGTTT

Fig. 6.22

[illegible]

29/375

CATGCAATTCTTCAAGCATATAGGACTTTGGGTCCTTTTTGTGTCTCAGACTTTAAGATGATGTCTCCTGGGGAGTCA
TTTACTATATGCAAGGAGAATAGCTGAAAAGTCAGGGTAGGCCAGCAGTATTTTCATGCTTTGTACTTGGGCAATATGGG
TTTTTCTGTTGGAGGTTTCTAGCAGAGGATGGTAGCAAAGTGACATTTAATTCTCCTGCTTGCCAAATCTTGGTGAGGCCA
AAGTGGGTGGGGGAATCGGTTGTGAGTAGGTGTTAATGACGAGTGTCTGGACCTTGACGTCTTCTCAGTCCTGGAGTAG
GGAAAAGGAACAGAATTAGTGCTGTTTAGAAGAAGCTGGTGATGGAGGTCTGCTTAGGAATGAGTGCAGATTAGGACA
GGGGCAGTGAGGGAGGCCACAGAGACTCTGGCTGCCTGTCTTCTGGCATGTCTGTGGAATGACCTTGCTCTGCCAG
GACTCTGGGAGGAAGCCTTTGATTTTGGGGGAATCTTTAGGACTATGCACATAACCAGACTTTTCTGATGGGAATCTCC
AAGGGGCCCTCCTGGGCCAGGGCCGTGGGCCAGCAGGTGTCTTCTTAACATGGTCTGTGAATAGTGCCCAACCTAGGCG
GTGCCTTCTTTTCTGAATCAAGCCCTTTCTCTCCTCAGTGCCAAAGCAGAAGTGGCTGGGTGGGTGAAGATCTGAGTGC
TGGCCCGGGGCCACAAGCCATGGGCCACTACCCATATTGCTGTGAGATCCTGACCTTTCTCTTTTCTGGACTCACAGA
TAAAGAGAGTGAATGAGGAGGAAAATCAAATATTGTGGCAGGGAGGGGCTGCACAAACAGGCATGGCCAACAGAAGTC
TCCCACCAAAGTGAGGAGCTGAGAGAAGGATTTGGGGAGGGAATGTAGTACTGATCCATGTTACTGTCTGACATGGGAGAGCA
AAGGAAAATCCGACTCTGGCTTGAATATGGTCCAGGTGTGGGGTTAGTACTGATCCATGTTACTGTCTGACATGGGAGAGCA
TTCCACTGTGATGGAATGGGGTGGGTGGGGTACAGGAGGAACCATAGAGGTAGAAGAGAAAGGAGGTGAGAAGGAAC
ATAGTCTGGCAGTTGACCAGAGTGTATCTGGCTGTATGGTGTAGTCCCCATAACAGGGCACCTATGTCTGTACATTCGA
CAAAAACAACCATCCAGTGTGTTCTTAAAGTCTGTGAAGGTACATTGTAATTTGAACTATATTTTGAAGATATCGA
GGATCCTATCATTTAGAGAATCTCATGGGAATTACTTTTTAAAGAAAATAATCATTTTAGGGGAATAGAAAGTCTCT
CAACGATTGTTTTGAATCTCTGGGTTTTAAATCCATTTACTCCAAGTAGGATTGAGTATTTCACTCTTTCACTGGCAG
TGGATTGTTTTTCTCCTACATATATGGCTTGAAAGCTCTTAACAAAGGATAGTAATTAATTATTTCCAGCTATTTTT
ACCTTTGACGTATTTAAAGTTGGAGGAACTATTTTCATTTAACAGAATTTAAACAAAATGAAAAAGTTATTTTCTTAA
GGTATCTGCTGTGCTTTTTCAAGGAAAAGCCTCCTCCAAAGGCACCTTTGGAGACAGTTACCAAAGGAAAATCCCACC
CACCAACAGAGACACTCAGCCTCTAAGTTTGGCTTTTGGAAAATGAACACTATTCTTTTTTTTCCAAACAGGACGCTGT
GAGATCAGTCATGTACACTATGAAAATAATTGGTGTGCATTAGTACACCTTGTGCCAGATTTTCATGCTTGTGAAAGGT
GATTGGATTCAAACCAGCACATTTAAAGGTCAACTGGTTGTTCTTAACTGTGCAGAAATTTAACTCTTTTCATTATAAT
GGATTTTAACCAAATGGCCATTTTAGGAAGGAGAGAGACTGCATACTGTGTTTTAACTTTCTGACCTTTTTGTCTTAA
ATTTTTTGTAAAGTTCTCAGGGATTTCTTATGGATGGAAAGGGCTGAGAAATCAGTCTCAGCTGGCATTGGAAGAG
GGTGAAGTAGAACTGAGTTCTTTTTTAACTGCTAAATTTAGGTACGGCTTTAATACGACTGTGCACATCACATAAG
CAATGTCTAAATGTCAGGCTGAATGTTCTCTCTCTTTTTAAATAGTACTTCAAGTTCGTTAGTAGAAGCTAGCCCTCTG
TCTCTTTCTTGCTTCTCCTCTCACCTTTGAGCAACTTTTTAAGTTCTTTAAGCTCTGTGGAGAAACCCATGTAA
TGATCAATATTTAACCCAGNTGGTTGACGTTAGCCCCGTTTCTGGAATGGGTATTTCACTGGGCTTTGGGGTTTGATG
ACGTTTTCTCCCAGTGACTGTGGATGCATGGATTAAATTTGTTGGTCTGCAAAATACCATCTGTCTACCAGCCATTTT
GCTGTATTTCCAAAATAAGGTAGGAGACTGATGTGTCTCAAATAAGCAGGGTGAAATTTAGTCATCTGATGATAGTTT
CTTGGGTGTGCATTAGTGTCTGTAGAGCCCTAGCAACTTTCAACATTATGAAGACTAGTTTGAAGCCTCAAAGGC
AGTATCTTTCTTGAAGAAAAAAAATAACACCAGGCATTTCCACAAATACCATACACAAGTGGTCAGGTAAAGGCTGTG
GGAGTTACAGCATCTGTTTACCTTGAGTGTGTGTATGAACCTTTGTAGTTCTAACTAAAGGCAAATGGAACTGTATAG
AGTCCCATTTTGTCAAGCTGACAATTCAGTATCCTCTTCTTTCTGTTGCTTTATAGCCCACTCTTAGTTGTTNTCTT
TCTATATTTCTTACAATTTTGTAGCTGTGAGGCTGTGTATTCTGTTGCTTAAAAATTTCTGTGCCTCATCTGCTTCACTTGC
AAAATGGGGAAAATGTACAGGATCCTTGGGGTGTGCTTTGCCAGCCAGAAACCTTTGTGGCTAATGGTGCCTTTGCC
TGAGTTTTGCTCGGGCCACTGGGCTGGTCTGCCCCACTCAGCCTGGGCAGGCTGTGCTGGGCTCACGCTACTGGCCCA
GATCTTATGCCTGCCAAGGGTGAGCCAGGCACAAAAGGCAAGGGGTATGTGAACAAGGGAGCTGCCCATTTGTGCACAG
CCAGTCATGCCAGCTGNAGCAGGGCAGGCAGCTCCAGATGCCGACACAAGTGCTAGCTCCCTGTGAGGCTGTGGCTGGA
CCAGGTGTACACAGATGGCTTCCACTGTCTGGCACCCTGGGAATGTGGTGGTGCCTGGAAGCTTGGAGACGCCAGGAACT
ACAGAGCCCCAAAGAGGGGTGTACATCCTCTGGCTTGGGGAGCTCCAGGTCTGGGCTCCCTGAAGGGCTGCAGTTCTCT
TCTTCTTCTCTCTTCTCTCCTCTCTCACCTGCAACATGGCAGCAAGGGGTGTGTTTCAGCCCTGTTTGTGTTACAG
CTCTTTTCACTCCACCATTTAGTGGGTCCCAAGTTCTTGTCTGTCTGGAAGAAATGAGGTACAGGACCACTCTCTGCA
GGTGAACAAGGCAGAGAGGAACCTTTATGAGCGACGGTACAGCTCCCAGGAGACCTGAAGTGGGTAGCTCCTCTCTGCA
GGCAGGTTGTCTGTCAAGCCTGCAGCTCTCAAGAGAGAGGAGACCCACAGTGGGTAGCTCCTCTCTGCAAGGCAGGTCA
TCCCTTCAAATGTGCAGCTCTCAGGAGAGAGAAGACCTACAGTGGGTAGCTCCTCTCTGCAAGGCAGTTGTTCCAACCT
CTGCCCAGTCTGGCTGAGTCCAGGGAGTTTATGGGCTTCAGAGAAGGGGAAGTGAGTGCTAATTGGTCTATGGACAGC
TGTGGGCAGCGTAAGTTCTCACTCCAGTCTGTGGAAGTACAGCCTGGCCCCCAGGCTTCAGGCCATCCCAGGCCTAAC
GGTGGGGCTTACGGAACTGCCCCCTTCTGTCCAGGAGTCCGTCTGCCTCCCGTGCATCAACCTGCTGCACTGGCA
CCCAGGCTGTTTCATGCCAAGGGGCACCTGCAGCCCATACTGAGCCACTCTCAGCTCCCCCTTGGCCCCCTCCCATGCT
CCTTGGTGCACAGAGTCTGGAGGGGGCCGAGGCAACAGGGGGCTGGTGTGTGAGTGGTACTCTGAGCACGGGCATACAC
AGCTGGGTGCTGACAGTGCCCCAGCTTGCACCTTAACCTTGTCTGAAATTTGGAGTGGGAGCTAGGAGTGGGGAGAGGCT
GGGAGTGGGAGCAGGCATTTCTGAGCCTGTGGGGGTAGGGGGGTTTCTGGGCTTCTGAGAGTACAGGGATGCCTGGG
TCTGCACCCACAGCTGGGTGGCTGCAGCTGTGCCAGGAGGGCAGGACTCCACCCCTCACACTCAGAAGTGGGTGGGG
CTTCTGCCTGTTTCCAGCTCCCAACAGCTCCATGGAATGTGCAGCCCTGGCTGCGCTTGCCTGCTGCAGCTGGCGTCT
TCTCAGCAGCCACTCCAGATGGGCCACCACTGTCAATTACATTACCTACCTTAGTGTATTGTGAAAATTTAAATGA
GTTAATCCATGTAAAATGCTGGGAACAATGTCTGGCATAACATAGAAGCTCAATAAATATTAATTCTCATTATTGTTGG
TATCATTTTTGCTATAATTTGAATCTTTTACATATTGTTGTGACATATGGAGGTTTTTGACCTACAGGGTTTCTTCTGA

30/375

GTGGCATAGCTCAGGGTAAAGTGGCTCTCCTCACCTCTCAATACCCTACTGCTCTTTTGCCTAAATTCAGTTAAAGGATG
GCTAGAGACATCATATGGGAAAGGGTGGTCTCTGAACCAGAGAGATGGGAGAGCAAATTGCTAAGSGTGTTCTTTGAGGGT
AGGGATGGAGAGCCAGACAGAGACAGGTGTCTCCAGACAGCTGTCTTTATCATTCACTCACTGCCCTCTGCAGCTCCT
GCTGCCCTCCTTCAGAAAGCGAATGTATGTTGCCCTCTAATGCCCTTCTCTGAGCTAAAGCCCAGTAGTTCTCAAACATCCT
CTTTCAAAGACACTGAGCCCTGGTAACCTTCATTACATTGTTGTTCTCATATTTTTCTCAAGTTAACTCACTCATAACC
TACAGTTTTCTTATTACATTGATATATTGATTATGAATCTTTACCATTAACTTTTTGTTCATTTCTATTCCATCGCAAAC
TTAATATTTACAAAAACAGGCTTAATCTGAGCACAAAGTGAAATGGTATAGCTGCGAAATACCTGGCAGTGGTAGGTACTA
GGTGTTTATAACATGATGACACTTAGAATTTATAGACACTTAGAGCATAGTTTTTCAAATATTTTGGCTGTAATCAATAA
GAGATAGATTTTACATCACAGTCTATACAGATGTACATTTATTTATATGTATGTATGTAGGCATAGCTTAAGCAAAAGT
GTCATGAAACAATGTTCAACCTATTGCACACAATGTACTTTTCATGATTTGTATTCTCTTCTTTTTTATTGAAAATGAGT
CTGGTTTTGTAACCCAGTAAACACATAACCTACAGTTTGAAAAACCCGTGATCTAGAGGAACATCCAGTGCGGTGCCTCTTG
AGTTCTTACGCACATATCCACATATCATCCGTATCATAcataaTGGGTTGTGGCCATCTCAGTTTTATTTTGAGGCACTG
CCTCTTCTCATCTCTGACAGAAAAAAGAAAAAAGAAAAAGAAAGGAAAGAAAGCTCAGATCAAGAACTAACACC
TTATCTTAAAAACATAATACTCTCCTTTACCTTTATGCTCTTTCCCTAATAACTATTCTTTTTCGATTGTCCTAAAAAGAAAC
CACTCTAATAACTTATAACACCATTGATTATTAGAAATTTAGAAACCACTTTTGAAGACAGTAAGATGTAATTAATGGG
GGGACTAAATTTATGTCATGGATAGAAAGACTATTTATTATAATGACATCAGTTCTCCCATAAATCAATGATATTTCAAT
AAAAGGGTCAACAGTCTTTATTTTATAATGGAGACTCACAACTTTATTTCCAAATTTATATGGAATGCAAGTAGCCAA
GAAGAGGCAATATAGCCCTAAAGTAAAAGAACACGGAGGAAAAACTTAAACTATCTGATATCAATACTTACTATAAAG
TACAATACTTAAAGTGTGGTACTGACACAAAGAAAAATGGTTCACTGCAGTGATCATATACATCTTTTGTGTAGATGTATT
TGTATGTATTTGATATTTTTGTATGCTGTTGCAAATTTTATGTTTTGTAAATTTTACCCTGTTGCAAGTATCAGAAATA
CAGTTGATTTTTCTATCCAGCAAACTTGCTAAACTTTGTGGTTAATGGAACACTTCAGCTATAGATTCTTTTCAATAA
CACAATCACATTGCTCTAAGAATATTTTTATTTTGCCTTATTCTTTTTCAATCCTATGCCTTTTCTGTGTTTTCCCCCCTT
GCTTTATTGCTTTGGCTGAGATTTCCAGTGTCAAATAGAAATGTTGATGGTAAGCATTTTTTTCTCATTCTGTATTCA
GAAGAAAAGCTTGTAGCATTTCAATATTGAGTTATTTTTTTTTGTGGTGTTAAACAATTTTTTTTTGTAAACACCTTTTATT
ACATTTAAAGAGTTTTCTTCTGTTTCTAGTTTGTCTAAGAGTTTTCTTGTGTAGACGTTAAATTTTATCAAATGGCATTTC
TGAATCTGTTGATATAATAGAAATTTCTCCCTCATTCTGTTAATCTGGTTAACTATATTAAATTGATATTTTGAATGTT
AAACCAACTGTATTAGTCTCCCAACCTTGATAGTAACTAACTGAATTTAGTTACACTGTGTTTCATTACTGGATTTCAGGT
GGTTAACATTTAAGATTTTTGCACGTGCTACATGTTAAGAGAGTTCGTGGCTGACTTTTCTTTTCTTTAATAACTTTGTTG
GGTTTTGGTGTAAGGATATGCTGACTTTCAATAACAAGTTGGGAGTGGTTCCTGTTTTCTCTCTCTGTAGAGTTTA
TGTAAGATTACTGTTAATTTCTCCTTATCTGTTTGGCAGAAATTCACAGATGAATCGTCCATTCATATAAACAAGTTTA
TTTGCCTTAAGGTTACTCAGAATATAATTTTAAATATATCTGAAGGATCTTCAGTTAATGTCCCTTTTTCTCATTTCAGATAT
TGGATATTTGTACCTTTTGTATTATTCCTCCTTTATCAGTCAGTCTCACTAGGGGCTTATCAGTTTTATTAGTCATTTC
AAGAACCATCTGTTGGCTTTTTTATTGATATTCTTTATTGTATGTTTTTAAATTTTCATTGATTTCTATTCTTATATTA
TCATTTCAATTCTTCTTTTTCTTTGGACTTAATTTGCTGTTCTTATATAATTATAATTATATAATTATTGAAATATAT
GTTAAGATAATTGATTTTTAGGCTTTATTTCTCACTTAATATTTACATTTAAGACTATACATCTCCCTCAAAGGCTGGAT
TTAGCTATATGGCACAAATTTTCTACTGTAGGATTTTCACTTTTATTCAGTTCAAATGTTTTCCAATATCTGTTTTGA
TTTCTTCTTTGAGCTACATGTTCTTTATAAAATATATTACCTAATTTCTAAATATATGGGGATTTTCCAGTTGTCTTTTT
GTTATTGATATCTAGTTTAAATCCACTTTGGTCACTTTAAGAGAATTTGAATTTCTGCCATTACTAGGGCTGTGTTCTAT
ATATGTTGAAGTTTTTAAATCATGTTGTTCCATTTTCTCTATAACTGGTGACTATTTTCCCACTTATTAGTCTGTTAC
AAGAGGTGTGTTAAATGTCTTATGATTTGTGGGATTATCAGTTTTTGAATTTCTGTTCATTTTTGTCTTTAAATAATTT
AAGCCTCTGTTATTAGGAGCATATACTTTTAAATATTATATCTTCTAGTAAATTCAGCCATGTATTTCTCTCTCTT
TATCTATTAAATGTTTGTCTTAAAACTACTTTGTATGGTGGAACATGGCTACTTCAGCTTTATTCTGGGGTAGTGCC
TGCATAGCGACCTTTGCTATTTCTTTTCACTTCAATCTTATATATTAAAGAAATGTCTCTGTGAAGAAACATATAGCT
TTGTTTTAATACAGCCTGGCAAATTTTCGTCTTTTGAATAAAATCTTAATGTTTGTGATTTATGTAATTTATATTGTTG
TTTTGTTTTAAATCTATCATTATTATTGCTCTCCATTTGTCTCATCTTTTGTGTTCCCTTTTTTAAATCTTTTTTACT
TTCTTTGTCTTGAGGTTTAGAAAAATTATTATTATTTTCCACTTTTCTGCTCTGTTGACTTCCACCCTCCCACTTA
TACACTTCTGTTTATGTGTTTTCAATTGGCATCAATATTAACCCCTCAGGACATTATTATCAAAGACAGTCAATATCT
ATTTAGATATAACCCACATAGTTAGCCCCCTTTTGACTCCTCGTTTTTTCTGTATCTCAGTTTCCAGCTGCGATCATT
TCTGTCTGCCCTGAAGAGTACCTGCAGTGCTTCTTGAGTACGTGAAAGCTGCTGAGGAATCTCTCAGCTTTTTATTTTTC
TGAAAATGTCTTTATTTTACCTTTGTTTCTGAAATACATTTTCACTTGGTATAGAATTCAGGTTGAATTTCTTTTTTC
TTAGGCATTTGAAGATGTTTTCAATTGTTTTCTGCTTCCATTGCCATCCAAAGTCTTCTAAAACTTCCCTAGGTAGGTAGG
TAGAAATATTTAACTCAAAGGATGAATAAAAAATGTATCCACAAACCCATACTTCTTTTTTTTAAATGGGATTTAAAGTTTA
TAGATATTTAGTATAAAGTATTTTTACATCTGCAGATTGAATGCAGATGATCAAAGGAATCAAGTATTTGATGATTCAA
AATAGAGACCTTTGTTTTACATATAGACTAAGGGTGGTCCAGGACTATCAAACAATTCAGGAAGTATTTTTCTAAC
TCTTGAAGAGAGAGAGAGGGAGCATAAAAATGTACATAAACCTAAGCTTAAAGAAAGTATGTAAAGTATGTTAAAAATAA
TGCAAAAAGCATATAGCATATATTTGCTTGAACCTGATTTCCACTGACTGGAGTAGTTTCATCTCTAAGAATCTCA
TGTCATATTATTTTATATCTTTCTCATTGTTGGAAGTCATTCAAGAGATCTGCCTTGATGTGTTTTCCAGATAATTTA
CACTTTTATTTTTTACATAGATGTTGATTAGCTGTGTTTTCAATTGAATATTCTCAGTTTGGGTATCAGTTTTTTCAGCAAAA
CAACTAAATGTGACACCTTCTACTGAGCATATTGGGTCTATACGTGTGCATTTGACTTACGACTTATATTTTCACTTA
AAAAATATTTTGGATACAATATTAAATTTCTTTTAGCATTAATAGAGTGCTTGAATATGAACCTTAGTGCTTTTACTTTTT

Fig. 6.25

31/375

AAAATATTTTAAAAATTTTGATATTTAAAAATTTGATATTTTAAAAATATTTTCTGTACTAAAAATGCACTACAATATAA
TGTGACAATTATGAATATGGATTTTAGATTAAAGACAAACCTGGGCTGGAAATAGTAGCTCTGTTCCCTTACTAGTTGTGTA
TCCTTGAAAAACAACCTCCAACCTTTCTAAGCATTAGTTTCCTTATCTGTAAACACAGGGTCCATAATTTCTACCTTACAA
TGCTGTTTTAAGAATAAACGAAGTGGGAAATGAGTTAGTATCATATTCATATATGGCAGCCATTATTTATTATTATTATT
ATTATTATTATTAAATTTCTATAGTATGTTATTGCCTAAGTTTGTTCATAGAATAATGTATTGGCAAATAATATTCCAG
TAGGAGAATTATTTCTATAAAATAAATTAAGTAACTTACTTTATTCTTTAGAGTTTACCAAGATAGGTATATTTTAGTG
AACATGGGAGTCAACAGCNTATAATAAATCTGTATTCTTAATTTAACAAGCATTATTTGAGTCTCTAACAACAAGCTT
AGCAGTGTAAAAACCCATGGCAGGGCTGGGCATGGTGGCTTATGCCTGTAATCCCTCACTTTGGGAGGCCAAGGTGG
GAGGATCACTTGAGGTGAGGAGTTGAGACAGTGTGGTCAACATAGACAAAGCATCGTCTCTACTGAAAAATACAAAAAT
TATCTCGGCATGGTGGCAAGCACCTATAATCCAGCTACTTTGGGAGGTTGAGGCAGGAGAATTGCTTGGATCAGGGAGG
TGGAGGTTGCAGTAAGAACTCGCCACTGCACTCCACTCCAGCCTGGGCGACAGTGCAAGAGCTGTCTCAAAGAAACAAAA
CAAAACAAAACAAAACAAAAAACTACCACGGCAGGAGGAATTTCAAGCATGTGAAAGCTGTTACCAAGGATAATTGTG
CCTCCATCACAGGTGTCTGCCTCTCCCCATCTCTGCTGTGAGTGTGGAACCCACACAGTATCACTTGTCTGGGTTTTCT
ACAGTAGCTGCCCTTACCCTTAACTCCCATTATTGTCTCTCCAATCCATCCTTTATACTTTTTCCAGAAATATCTTT
CTAAACAAAATCATGCCATCATCATTACACATTATAGACAGCTGTTGTCTGTGGAACAACTTCAGCCTCATTAAG
ATGTAAGGCCCTCCGTAATCTTGCCTTCCAGCTGTATCACCTCCTGTTTCTTTTCTGAGCCTATACTCCGCCATA
GGACTAATTGCAAATCTCCATTAGTACCGTGTCTTCCAGCTGTTATTTTAGCTAGACATGTTTTTTTAGCCATTTCT
TGCCTCTCAAAATTTGTACTCATTCTTTAAGATATAAGAGAAACACCATCTTATCTATAGTCTCCCTAGATGTAGAGGAT
GAATTCGAGTGTTAAAAGCAAGAGGTGGGCGTTGTAGTGTTCTAAGGTAGGGAGACTAGGTATAGAAAGAAACCTTGAG
ATGGAACCAAGGACAGAGAACTTTTGAGAATGCTGTCTCTGTGGGCTGCCTGCCCTGTCTTTCAGCTGGAAGTGGT
TCTTCTTTCTGTGTTCTCTTTCTCTGATGGGCTGCTGAGAATTATTGCATGTAGGAAGCCAGAGAATGTCTCACTGTT
CTCCAGCAGCTGCTGCTTAGGGCTCTCTTACTCCACTCTTTTTTGATTCCCTGGTCTCCTGCAGAGCCATTTATTGTG
TGGACCTTCCCTATACGTTGTCTTCCCCTTAGCTCAAGGCCTGGCCTCTCCTTATCTCTCCTCAGAGTTTGACTTCTGA
TGGATCTGTTGTGCTGGAACCTAGCTGTGATGTTTCTTCTTCTGCTTACCTATGGGTGGTTCCTCAGCCCTTAT
ACTGGTCCCACCTGGCACCAGCCCTGACCGATTAATCCCTTTCATGCTCCTCCATACCCAAAGGTCTGTCTTGGACC
AGGGAGGCTCACTGGGCCAAGTATTTCATCACAAATGTTAATAAATAAGTAACCTAATTTTAAAGAAATATCTCCAAAGAG
TGTAAGCTTCTAGGAGACTGAGTACAAAAAAGAAAGGGGTGGAGCAGGACAGAGTATGAAAGAAAGACTGCAAGAAAA
GGTCAGGTACAACCTGGGAGAGAAAAATGCAGAAGCTGTGGGCATGCAAGGCCAGAAGTGTAGCCAAGAAGCAGNAGGTG
AAGTCAAAGGTGGATGAAGGGAAAGAAAGATGAAATGAGAGAAAAATCCTAGGAGTCTTAGCATTGGAGGGGGAAGT
AGGTGCGAGAAATGATCTAATAATAGTTGAATGGAGAGAAATCAATGTATGGTCAATCTTATTATCACAGATTATGT
GTTTGCAAATCCACCTACTTGCTAAAATTTATCTGTAATCCCAAAGCAATCCTTGCGGCGCTTCTGCAGTCATTTGTG
GACGAGCGTGAAGCAGTGAAAAATTTAAGCAGTGCCACATGTGTATTTCCAGCTGAGGGTGAACAAGGGATGCTCAGCC
ATCGTGTTTTAGCCCTCATGCTGTAAGCGAGGGTCCCTTCCATGATACGTTTAATGCTGTGTTTTGAATTCTGTGTT
TTTCACTGGTGATTTTGTGATGTGAAATGGCTTCCAAGCATAGTGCTGAAGTGCTCTCCAGTGCTCCTAAGCACAAAGAA
GGCTGTAATAAGAAGAAATCTGGCCAGGTGCCCTGGTGCATGAGACCAGCCTGGCCAACATGGTGCAACCCCATCTCTA
CTAAAAACATAAAAAATCAGCTGGGCCCTGGTGGTGTGCACCTGTAATCCTAGCTACTCGGGAGGCTGAGGCATGAGAATA
GCTTGAACCCGAGAGGCGGAGGTTGCAGTGAACCGAGATCATGCCACTGCCTCCAGCCTGGATGACAGAGCAAGACTG
TGCTCTCAAAATAAAATAAAATAAAATAAAAGAAAAAGAAAGAAAAAAGAGAAATCTGCATGTTGGATA
AAGTTTGTTCAAACATGAGTTATAGAGCTGTGTCAGGGTGTTTAGTGTTAATGAATTAACAATATATATTTAAATAAG
CTATCTTTAAATAGAAACACAAAAAACAAGTTATGTAATTGATTAGGTGATGAAAAATTGTGACCAGAACCTGCGAG
AAACCTGATCTTACATTTCCCTTGGGAGCAATGGTTGATGTTGCTAATTCAGTGTTCTCAGTGACTTTATAGAATGT
AACTGCCACAAATAACAAGAACTCACTCTGTAAACATTTTGTGTTGCTAATGGATATGCATGTTTATAGACATTTTGTAGA
ATTATAGTCAACCCAAAGTGAAATGGAACCTCCTTTTATTTGACTTGGGAAGTTGCTCTATTCTCTTCTTCAACAAA
ACTCTAAATAAAATCCTCTTTTGTCTGGTTTATTTTAGCAGATGTTTACTGGTGTCTTACTGGCAAAATGTGTTGAGTAA
GTTAGGTAAAGTTGACCTAGACACAGTTTTTGTCTCCCAAGGAATTTCTCAATTGATCATGGAAGACAGGAGATGTGTGTA
ATCAACAGTATTGACATTAATTTGTATTCCTGGAACAGGTATCGACTAGAGTCAAAGAAGGTTTTGGCTGGTCTCTGAAC
AACAAGGAACCCAAAGTAGGTTACAAAAATAACCACATATTGTCCATAGAGTAGGTGTCTACAAACATGCTAGTGAAGGT
TGACATTATCTTAGAGCTTCGGGGATTTATAGATGGAAGGGATCCTACAGGCCAGTATGTGACAAGGACCTGAGCATG
TTTAGATGTAGAGCTAGAACTGAAAACCAAGCCTCATGGCTGAAACTGAATCCTTTCCCACTAAACCATAACAGGCTCTA
TGCGCTCGAACTAGTTATTGGAGTCCCGGCTTAAAAATGAGCTCATGTTCCAGAAATTCCTTACTTAGGTGAGATGTTTATA
AGTCAGTCTGAGGTTGTTCCAGGATGAGCTCCAAGGGTCTGTTTTGCTGTATATGAATATTTTATAGAAGGAAGCTC
ATAAATTTTCTATGTGATTCTCAAAGGAGTTCATGATTCCAAAAAGTCTAAGAACTTCTGTGCTTATTCTGAGGTTAACT
GTGCACCACAAATACTAAATCTATTGTTGGGTGGTGTCTTGACATTGTATTTTGTATCCCTATCAATCTAGCAGAAGAT
TTTTTTTTTTTAAATAAAGAAAATGCTCACTCTTGGCTAGGATGTGGTGAAACAAAACCTTCTATATTGTGAGTGGCAGT
ATAAATGGGTATGAATTTTCTAAAAAGCAATTTTCCACTTTTGTGACCAGATACCAAATTTGTCTTTCAATAATATATT
CTAAGAAAGCAATAAGAAAAAGGAAGTAATTAGAAATATGTAATAAGATATTTATAGCATTTTTGTTCATAATATGAA
AACTAGGAATCAAAGTGTCTAAGAAATTACAGTTTTTAAATATCACTTAGGCCGGGTGCGGTGGCTCAAGCCTGTAATCC
CAGCACTTTGGAAGGCTGAGGCAGGTGGATCGCCTGAGGTGAGGAGTTCGAGACCAGCCTGGCCACATGGCAAAACCC
TGTCTCTACTAAAAATACAAAAATCAGCTAGGCATAGTGGCGGGTGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCA
GGAGAATAGCTTCAACATGGGAGGCAGAGGTTGAGCCGAGATTGTGCCACTGCACTCCAGCCTGGGCGACAGGGTGAAA

32/375

CTCCATGTAAAAAATCACCTTAATATTATGAAAACTGTTTATGACAAGACATGATGTGAAAAATAATCATGGCA
TATATAGCATAATCACAATTTGTTTATGTGTGAACAGAATAACATGTTAACAGAGGTTATCTTTTGTAAATNGGACTAG
AGGTGTTTCTTTTCTTTTATTTTCTTTTGTATTTTCAAATTGTCTAAAAGACTATATATTTTATAATCAGAA
GAAATATTGCAACCATATTTGTCCCANTTGAACATGATTTACTTACGGGAAGTCCATCCTTGTCTTCTAGTTTCTA
CATTTTAAATGTCTCATCATTCATTTTGGCTGAAAGTTAAATGCAATCTCAGTTATTTACGTTAATTCAATTAACA
GCCCTTCTCTTCCCACAGTATCATTTCACTTAAACCTTCATACTCAGCCTCCTTTGCAACTCTGGCCTCTCTTGCTT
CCATTCTTTTGTCTTCTCTGATTAAAAAATACTAAATTCGTCTGCTTTTCTTTGACAGCATTAGCCTTTTT
TCTCCTCTGCTCAGAATATAATTTTGTCTATTCACTTTTCAAATATTTACCACCTGTTCCCTTTGTTTCTTTATCCTGG
TTTTTAATTTTGTAAAGGTAGAGGAAGCATTCATGGAATAGTCTGTTCCAAACCTCAGAGCCTCAGTAGTGCTTTTGCAT
TAATTAAGATATGTATTCTTTTGGGATTTCCCAAAGTATTTTCCCATTTATATCAGGAACACATGTGTATATGTGCA
TACATAGGGTATGCATGAGAATGAGTGATTACGCTGTGCATGTATGCATTCATGTTTGTGTGCATGTTGGTGCATACA
TGTGCAAGTTGGTGTGCACTTGTGAGTGAATACATGTTCCAGTTCTTCCAGAACAGGAAGTGTGCTCTTCTATATGC
CCTACGCAAGTAGACACTGCAATGATGCTGACTGCTGTTTGCCTGTCTCTGTATAGCCACCTTTTCCAGAGCTTGCCATC
TGGATCTCAGACAGTATGCAGAGGAGAGGAATGTTCTAATCCACCCTGGTACCAACAGGCTGGCATCTGTACTTTGAAA
GCTTTGATGAAGAAGATGCAAAATGTGTTGGCTGTGTGGGCTTTTCTAGCTGCTTCTGACTGGGCTAGAGACAGGCAGC
ATAACTTTTAATCTCTCCAAAGCCTGCCAACTGGCAAAGAGATACATGTATTAGATAAGATGGTGGATCTCGATTTAT
ATATGTATGAATGCAGACTGAATTAAGATGGCACCCTAAGGGAGAAGCCAAGGACCAAAATCAGGAGACCTCTAACTGA
GTCAGAAATCAAGGCCAGGATTTATAGGATGAACATTTTAAAGTGTACATTAGAATGTAAAGTAGGTATTTGTAATTGA
AGTACTATGCTTATTTTATTTCCATAAACCTAAGGTCTGGCTTCGAAGTGGCCTCAGGGTATATCCGTCAGCACTGAGC
CTTGTAATTTGCCTGCTAAATCAAACCTATGATGAAAAGAACAGGCAAAATAACACTGTCTTGCAGTGTGCAAGTCCC
GTGGCTGTATTATAGAGTGCTCAGCTCAGTGTTCACAGTGGAGAAGAAGTACGTTGATATGCTTTCTGGGTTTGTAGA
GCTCTTCTTCTTCTATCCAGAGACAGAGCTGGGTAGAGAAAAGGATAACCAGCAAGACAAAGGCTTTATCCCAATATT
ATATGTTTAAAGACTCAAGAGATATGGTGAAAATGGGACTTTATTAATTTGCCTGATTGGAAAACAAACATGCAAAATTG
TACAAGATTCTTAATGTGCCAAAATGCGAAGGAGAGCCCTGACGAGCATGGAGAATAGTGAGTAATGCTTATGTCC
TAACAGTGCCCTTGCCTTCATTGACCTTTGGAATATTTGAAAAGTCAACCTTTTCTATTCTGTCTGTATAGTCTT
ACAGTGTTCCTCTCTTTTTCTCCCTCTAGGGAGTTATCCAAAGCCCCCTTCAAGAAATGCTAGCTTTCAGGAATAA
TCAATCAAGCACACCTTTGAGCAAATGTAAGATTTATGTTCAATCTATTATAGATATTTGATTTTGACATTTGTATCCTTT
ATTTTGAANAAATGAATGTCACCTACATGCAGACAGATGAGGCATTTTATGCTTTTGTGGGGAGGATAGGTTTAG
GGGAGCTCTCCCATTTGCAACCCGGCTTTAAACCCACGCTGGCATGAAGAAATCAATTAACAGACAGAACTCTTCTG
GGATTGGGAATCTGGCTTCTCATTTAAAGAATATCCCATTTTCTAACCATAATAAATTTTAATTTCAAGTAAAG
CCATTACGTCAATTTTAATGTCAAATACATTTTAAAGAAGATGCAGACTGTTGAAAAGATGGTGGAAATGATTACAA
CCTAAGCTTGGAGCTTACTGAAGTCAATCAACTTCAACCTGGAGCTTGCTGCAGTTCGACTGCACCTAGATGGTTTGTG
CTTTAGTTTCCCCATTTTATGTGTAGCAGAGGCTGTTTTGTTTACCTGATCTTTTTTTGTAGAGAGAATGAACTGCCTGA
GGGACAATACAGTGCAC'TGGAGAGGGATGAATAAAGTCTCAAGAGCTGCTTGTACTATACCACCTACCTCAAACAGCA
GATGTTACAGAACTGCTTTTAAAAAATGTTGCCCTTTCACATGTCTGCTAAAAATATATACCTAAAAAGACCTAAAAA
AAAAAACCTTAAAGAACTAGAGAAGCAGGCTGTAGTTATACAAAAGCTATATGCAAGATCATGGAAGCAAAAAA
TGCATAAAGACATATTAGAGCTTCTTAAAGTTCCAAGGGAGCTTTTGATAATACATTCAAAACATAAATGGGAAAGTCA
TCAGAGAATTGCATAGTCCCAGGAGACTGCAGAAGGCTTTGAAATGGATTAAATAACATTGATGGGTGCGATAGGAAG
CCCTTATTCCCTTTGACTTATCATCTTTCTTTTCTTTTAAATTCATTTTCCAGGAAATAGTTACATGATCAACTCTAC
CTGGCTGACTCAAAATTTGGTTTCTCGGTTTGAACCTTAGTTATCTGTATATCTTACAGCTGTCCCTTTCAGTTGCTTATC
ATGTGACTTGTCACTTCTGACTGGGTTTGAAGCTTACAAAGTCAAGAAACACATCTTTCATATCTTTGGAATTTCTCT
GTAATTTTGATAACCTGATTGTGTTTGCAGATGGTGTGTTTAAACAATGTTTGCCTGGCTCACTGGATACTTCCAGATTTTA
AAAAAGTTAACAGAATGATCTTCAACTCTGCTTCCATTGTTAATATTTTATGTGCTATATTTGATAAACCCTGTAAG
ACCAGATAAGACAAAAGCAGGAGAAACAAGTTGTAGATACAATAGTGAGCGTGTAAAAGGCATTTAATAATGCCCTTGAC
ATGAATAATAAACATACCAGTAATAAAGATACAACAACCTTACGTTTCCATAGATTCTTGATTCTCTAAAAGCCTTTT
CATATAATAAAGGACAGAGGGATAAAGGGAGGAGTAAATATAAATGCAAGGAATACCAAGGAATGTAGACATGAAAAA
GCAAGAGGACCAAAGCAAGACAAAGAAAATAAGCCAAGAAATAAAGAAATGAGGGAGAACTTACTAATAACTTGGAA
CAGTTGTTGGCTAAACAGCACACATAGCAGAGTATCAAATAAATATTGACAATGTTGGTGTCTTGTAGTGAGTAGAAT
ATCCTATAGACAGAATACTCTAGGATATTTATAGACAGAGTATCTGTCTATAGGGTATTTCTGCCCTGTTTATGTTTT
GTCTTGTCTTCTGCTGAGTTATTAGGGAAAGGAGTATCGTGGATTCCCTCACTTTCTTCTCTTCCATTTTTATTCTGTG
ATGGTTAATATTGATACTAGTATGGCTATCTTTACTCCAGATAGTCAATCCACATCATCAAAAAGATATGGACGTTTGA
GTGATACTCAACTTCAGTAGCTTAGTTCACTGATTTTCAAAAAGCTCAGTTAGGCTTGTCTGCTGAGAGCATAAGTGAAT
TTTGCCCTTGTGTGAAGTTCTAAAAATTTCTAACCCTTAGGAGGAGGCTTAAAAATTTATGTTCTATAATGCTGAATAT
AGTAACCTTATTATAAAGAAATTTCTAAGAAAATAAGACATATCAACTATGTTATAGAACTGATATTAAATCTAGAAGTGA
AAAAAATACAGATAGAAAAGTTCTGCTGTGATGTGCTAGAGGCTACAAGAGATCCCTAAAAACACTTTTATTACTGCTT
TGAAGGGATAAGCTCCCTCCAAAGCATGGATCAACTATTTTAGAGATTTAGAGATTGACACTGCTGTTTTGGCAATAA
TTCTACCTTCATACTTTTCACTTCTGGATCAGCAGAAAACCTCTCTCTTTGTGATGATAAAGCTGTAGCAGGGGGA
CAGCCAAGATGGCCGAATAGGAACAGCTCTGGTCTACAGCTTCCATCAAGCTACCAATGACTTTCTTCACAGAATTGGA
AAAACTACTTTAAAGTTTATATGGCACCAAAAAAGATCCCGCATTCGCAAGTCAATCCTAAGCCAAAAGAACAAAGCT
GGAGGCATCACACTACCTGACTTCAAACTATACTACAAGGCTACAGTAACCAAAACAGCATGGTACTGCTACCAAAACA

33/375

[illegible]

34/375

GGTTTGAGATCAGCCTGGGGAACATAGTGAGACCCTGTCTCTACAAAAATAAAAAAATTAGCCAGGCTTAGTGGCAT
GTGCCTATGATCCCAGCTGCTTGGGAGGTTGAGGTGGGAGGATCATTGCAACTGGGAGGTTGAGGCTGCAGTGAACCG
TGTTACACCACTGCCTCCAGCCTGGACAACAGAGCAAGATCCTGCCTCAAAAACAAAAACAAAAACAAAAAAGA
AAGACAAAAAGAATTGCAAGCGGCCAATACATAAGAGAAGATGCCTAACACCTAACCCCCCAATTAGCATTGTGATTA
TAAAGATAACAATGCTATCATTTCCCCACATCATTTTGGCAGAAATGTGAATGGATGGTTAAACTCGGTGTGCCTGTGA
GTTTGATGAAATGGATGTGCTCATACAACCTACCTGATACAACCTTTTGGAGGGCAGGTGGCTGATACTTACTGAAATGT
GAAATGTATAATCTTCTTGGCCAGAAATCTGGGTCTAGGACTTATCCTAAGAAGACAACCTATACAAATGTAAAAATAC
ATTTATGTAGTATGTTTGC AAAAGCATATTCATGGGGAAAATGAGAAATAACTTTAATGTTTATCAATAGAGAACTGGT
ATAGTAAATTATGATAAATACCTACTGTGAAATCCTGCATAGTCAATAAAATGATGGTGTAAAGCTTCATATATTAATG
TGAAAAATTATTTAATGGTACAAAAACAGGTTATGAAACACAACAATCACATTTCTATACAGTCAATATTACTAGAAATAT
GGGAAGTTGTTAATTTAAATCTGAACAGTTAGAATTTTCAAGGCTACCTTTACTTCTTTGCTATTTAACTTCTCTCTC
CCACCTATCAACTCTATGTCTTAGGGAAACTTATTTAACCTTTCTCACTCTTGGTGAAAATGGAGATAATACCAAACT
CTTAGAGGTTGTTGTGAGAATCAAGCAATAAAATACATGTCAAGCACCTAGTAAAAATGTATTTTGAATTTTTTTTGT
CATACACAGTTTCTTTTTTTTCTTTCATTATGTGAGTACAAACAGCTGTGTTCTTATGCCAGATTCAAAGAGAGAAAG
CTAAGTGGGCTTTTGAATAACTTCACTTATTTAATGCAGGGAAAGCTCTAGTTCCAAATATGTGGAACAGTATTTTC
CTAAGGCTGCAATGTGTGAGAAAAGACCATATTGAGTCATTGTTTTCTGAAGCCAAGACAGGAGATTGAGAGACGGAT
GCTGATGGGCAGCCTAAAATAATATTTCATTCTTGTCTATCCTTAGGCAGTTTAAAGACCAAGTCATTTTGGATAGATCTA
CAGTTTCCCTCTCGGTTTGAAGAACAAGCTTTTGTATTTATGTTCTTAAACAACAGCGCTTTGTCTTACTACTCAGG
AGCGTGCAAAGCAAACAGAGATTTCCTGAACGGCCATCCCATTATGGTGAGGAGTCAGTCCAAGAGGTAAGTAGACA
TACTCAGCTGCAACCATCTGCAGAGGGCCACATTGGCAGCAAAAGGAAATAGCCAAGACTCACAGGAGCACAAACAGCC
AGTCAGGTTTGGGATTCACTTCTCTGATACTGTGCCAAAGTTGGTGGACTCAGCCATTCTGAAACTCACTGTTCACTTG
GGCCTGCTTTGCACAACAAACAAATAGCCCTGTTTGTCTTCCATGTCTGAGGCAGAAAAATAAAATGGCAATATT
TTGAGTGTTTTTACATTGGGAATTTCTGGTCCATAGATAATTATTTAGATACCCCTGTGTAATCTTTTCAAGCTGTT
GAAAACCTGTGGAATAGGGGATAATTAGGGCTCAAGAGATTTCATTAATGGTTAAAGGATCATTAGAAGGACACGTACTG
TATCCCTCTTCTTATTTCTCTTCTGCACTAAAACAACCTCTGGCTTGCTACCATACTCCGCACCCATGTGCAATTTT
CACTTAGCAAAAGGTCAAGTCTAAGTAGAATCTATGAAGTTGGGATGATTCTGATTGGTAATAATGCTAGCTAGCAAG
CATTGAAAATTTGTACCAGGTTTTCTGTTAAGTAGTCTGCATGCACTATCTCAATGATTCTTAAGGAGTGGTCCATAGA
TCACTGGCTTTACAAACATTGACGCATGGTGGTGGGTGTGGGCAATGAAAAGGCAGATTCTCTAGATTCTACTCTAGATC
CATGGGATCAGCATCCTGTAGTGGGAGCCAGGGATCTACCATTTTAGCAGGTGCCTTGGGTCATCATCTTATGCACAT
GACATTCGAGAGCCACTGTGTTATTTCTAGTGCAACTGTGACTCAGTGTAATCTGCTTTCTTTCCACTCCTCTGATTT
CTGTGTGTAAATTTTATGACAAAAGTTAGACAAAATACCATGGACTGAAGTTAGATATAGAGCAACTCATGTCTCTTT
TAGTTGCTGGTGATTGCAATNTATCTCCATGGCCAAATGCTTTTGAAGCACTATATGTGATATTTATCTGTATTGTG
GGAAGGTTAAAGAAGTGAGAACTCTTTCCTTGGCTTAGTGGTGGCCTGTGCTCTGGAGGTAGAGAGGAAGACACAGGGC
CATGGAGGTGGGACTTACAGGTGTGGTACAGGTTGTATAATCATGATGGTGACCCTGCATGGAGAAGGGAAAGCTTGAC
CTTTTCCTTGGCTCAGGGCTATGCAATAGGGCTGGCCCATTTCTGAGAGGGGAAGGTAGCTGATATGCAGGTGTGATT
CCCTAGGGCCAGAAAGACCTGCCTGCCTTCTGCCTTTGTTGTGTCATGCTTCATGAGGCCTGAAATGTTCACTGGTGGTT
ATTTCTCTGGTTCTCAGCTTTAGCTCTAGAAAGCCCCTATTGAAATGACATGCCACTTGGAAGATAGCAGGACCATTTA
CTTATATTTTACAGACTGCTTTAATCTGCTACTCTGGGGATGGCACAAAAAGATTTAGTTGATGGGAGGGAGGTTA
GGCCCTTTGTGGGCCACAAAGAAGAATCTGGGGAGCCAGGGAGACTATTCTGGGGGTAGAAGTGAGGAGGAAAGGCT
CTAAAGACAAACTGGACCTTAGTGCACAGTTCGAGGGCTGTCTCCAGAATACATTGTTTTCTGAAATTTCTCCAGCCC
TTCCATCATTTTCTCTCTAGTGAATGTCCAGTGTGCTGAATAAGTCCCCCTTAGTCACAGGACTGGACTGCAGCAGTGC
TGCAGGTGTTGAGGCTCAGTGGCACAAGTGGCTCTGGGAGGGAATCTTGATGTGCGATTCTGTAGCTGCACCAGCAGAG
GGGGAAGAGGGAGATAATTACCCACCTCTGAGTCTGAGATCCCCCTACCCCAAGTGCATTCTTCTGCCAGGAGCAGGAT
CATTAGAATAAGTGAGACTTAGCTTAGCTCATTCAACTCCTTGCCAGGCCCCATGCAAAAGCTTTCAAACCTTCAAATAT
ACGATCATTTCTAGAGACTATGTTGGGATCCCCTGCATTTCTTTATCCATTTGTTGAGAAGGACCAGAGATGATGCCTA
ACTTTAGCCAAGAGTTTGTCTGTGGGTCCGATAAGCCTCACATTTGATTTTATTGGAATTTTAATCTTGCAGAAAGTAC
CCTATGTTTCAATTTTAAAGCATTTTTTTTGTAAACTGAAAACATCCCTCAATTTTCCAATGTTTCGTTTGTCTCTA
GTGCTAATTTATGTGGTAAGTGGTACTGGTTTCAATTTTACTCAGGAGGGTGTAAACACCTTTTATGGAGAAGGGGTG
GCTAGGAAGGGGTTTCTAGTGAAGGAATTCATTTTTCTTGGTCTTCATGGTGGGTGCTGGGGAAGGGTGTGCAGTCAGA
GGGCTGCAATTTGCAGAAACATGGCTCTGTGTGTGAGCCTGGGTTCTCAGGAATAGGAAGCAGGTAGGTGCAGTGGGTG
GGTATTCATGTGACAGTGGAGGAAGATAAGGACAAAGATCATGCATGAGTAGTGAATGAATGAATGAATGAATGA
ATGAATGAATGAATGATTTGTGTATAGAAGTCCATACTCCTTCTCTGGGGTGGCTATTCCTTACCAGCAGACTCTGTT
CTTTCTTCTGCTGCTTCTTAGTGAGCACGTCTAAGTCTCAGTTGATATTCTTGTCTCTGAGAAATTTCTCATCAATGG
GAGGAGAAAAATATAATTCGCTTCAACATAGCTCATATTTAAGCTGAGAATTCAGCATGAATTCAGACATGGTTTCATGT
ATTTTGGATAATCAGCATAGCTGTTTCATGATCGGTAACCCTCTTTTTTCTCTCTTCAAATCGTTTTTGGTTAGGTTA
CCATGACTGAAGATTAATGACTTCCATTATTTTTTTTCTCTCATGCAGGAATGTTTAAACTAGTCTAAACTTTGTACCA
ACTATCATATGAATCATGTCTACTATGTTACCCTTGGTGTCTCATGTCTCTGGGTTAGTGTCTTGCATGACACAGCAA
AATACAGGGCAGGGTTAAAGTGTCAATTGAGAACCAGGCAAAAATGATGATTAAATAGTGACCAACACACTTCACTG
TGCTGTTATCTTAGAGGCCTTAAGGCAAAATCTTACTTACAAATATTAGTTGAAATGCAATATGTGATGTTAGTAGACA
CATTTCAACCACATCTGGCAGTTCATTAATTCACCTTCATTTTTTTTTTCTTTTCTTCTTTTTTAAATCTTTTTTTTTT

35/375

ATACTTTAAGTACTAGGGTACATGTGCACAATGTGCAGATTTGTTACATAGGCATACATGTGCCATGTTGGTTTGCTGC
ACCCATCAACTCGTCATTTATATTAGGTATTTCTCCTAATGCTATCCCTCCCTCAGCCCCCTACCCACTGACAGGCCCT
CGTGTGTGATGTTCCCTGCCCTGTGTCCAAGTGTCTCATTGTTTCAGTTCCCACCTATGAGTGAGAACATGCGGTGTTT
GGTTTTCTGTCTTGTGATAGTTTGTCTGAGAATGATGGTTTCCAGCTTCATCCATCTCCCTGCAAAGGACATGATCTCA
TCCTTTTTTATGGCTGCATAGTATTCCATGGAATTCACCTTCATTTTCAATATTGTGTATATTTATTGTCAGTGAGCTTA
ATCCTAATAAAAAACAATTTTATTTCTATTTATTTATGTTTTTCAATTTTTTCTTTTGAGACAGGATCTCACTCTGTCCAC
TGAGGCTGGAGTGCAATAGCACAAACCATAGCTCACTGCAGCCTCCAACCTCTGGACTTAAGTGATCCTCCACCTTGGC
CTCCCAAGTAGCTGGGACTACAGGTGTGTGCTACCATGCCCAGCTATTTATTTATTTGTTTCTTTTTTGCAGAGATG
GGGTCTTGCTGTGTTGCTCAGGGTGGTCTCAAACCTCTGGATTCAAGTGATCCTTGCCCTTCTAAAGGGCTGGGATTAC
TAAAGGGGCGAGCCACCATTCTAGCTGACAATTTCTTTTTTTTTTTTTTTAATTATACTTTAAGTTTTAGGGTACA
TGTGCACATTGTGTCAGTTAGTTACATATGTATACATGTGCCATGCTGGTGCGCTGCACCCACTAACGCGTCATCTAGC
ATTAGGTATATCTCCCAATGCTATCCCTCCNGACAATTTCTTTAATGAGCAGTCACCATATAATAGGCTCAGTTCTA
AGCATGTATTTGCCCATTTAATCTTACACCAGCCTAGGAGGTAGTTACTGTGTGTGGCACCCTTTTATATAGGAGGAA
ACTGAGGCATAATGCTGTTAAGTAGCTTGCTCAGGGTCTAACAATTAAGAGTCAGAGCTGGGATGTGAACCCAGGTGGC
CTGACTCCAGAGTTTCTACCAACCACCATGTTATACTGCTTTACATGTTTAAAGCAAAGATATGGTTTTAGCATCAAAAT
ATTAAGAATGCACTCCCCACATTTTCTTATTAAATGTAATTGCCAGTTTTTGTATATGTCATTGTCTTAATGCTTTTCG
AGAACTTAGACAAAGAGCAAGACCACAGATAAATGGATCCTTCTGTTTCAGGTCTCATTACCTAGAAGAGTTTTGACTG
CAATATATGAGTACTAAAAGTTGATGGTTTATGCTAATTTAAGTGTAATATATTTTAGAATTTTGTACATGCATTAT
TANTATGATTTTCATATTTCATGGCCTTAGGAAGATTAATTTAAACAATAACAACAAGAACAACAACAACAATAACA
ACAAAAAATTTCCCCCATGTGCCAAGAGCAAATTTTGAGGTCCATTTATCCAGATAAAGTGTTTTGTTATCTGAACCAA
GAACATGAACTTTATCTTTATAGTGACCACAGACTCCCATCTCTAGTATCATGATTTTTAATTTGAATTAAGCATTTT
TTTTTGCTTTGTTAAGATGAGGCAGGCCTTCTTGCTGACATTTTAAAAAGCAACTATTTTCTTTTCAGTTTACACTATG
AGGCATTGGCTCCAACCTGTCAGCATTGAAACTGTGTCAGCAGTTCCCTACCAGGAACTGGTTCCAAGGTCTAGGGTTTCC
TTAGGTAGAGGCTGGCACTGTGAAAATAATGGGGCTCTTTATCCATGTGTCACCTGGAATGGAGTTAATACCCTGCCAGTC
TTAGTTGATTTGACATACTAACAGGATGGGTCTGAACGTTTTCTATAGTTTACTCATGAGTGACTTTCTTTGGCTTACG
TAAATGGCAAGGCCAGACAAATTAGCTTATGGACCTAGCAATCATTCTTGGCCAGATTTTGAGACACTTTTCAATCAA
CCATAGTTGCTCTAATACCTGAGATTTGCTGACAGTGGCTTGGTTGAGAAAAAGGTTTCAGTTTCTCTGAGCAATTTTCTT
TTATTGGGATCATCTTAATTTCTTGTGTTGCGGGGTTAAGATGAGGAAATATGAGCAAGGACTGCACCTCAGCTATTTGGG
TGACCTTGTATACCATGAGCTTCTTAGATAGGGCTGATGTGATCACCAGAAACATTAATGTATCGTGATGACAGGA
GATAGTCTCTCTAGCCAGAACCTGCTAATACAAGTCTGATGAATTGAGAATGATGCCTGAAGGAAGCAGACTGACGTG
GTGCATTAGTAATTTTAGGCAAAAGAAGATAATGGTACTAGTATGTATATTTTTTAGTTTTCTTTTCCATTGCTTTGTT
TTGCACAGGCTGAAGAAAATAAATGTAAACAGCATATTATGGTGGCTCAGGGTGGATAATAATGGGACATCACTTCCTT
TGTTTTCAGTGTGAGGTTGCCCTGCTATGTGACAGCTCCAAGGACTAAAGATTTCAATCCCAGAAAAATGTGAGTCC
CAGTAACATGTTTCAGGTTATCATGATTATTATGATTATAGGAGGGGAAGAGCAGTGCTGGTCTTTTAGAAAGTTCTCA
TCATGAATGTGTTCTGGAGTGAACATCACTTACTAACAGATGAGCAGCTTGAAGTTGAGTCAAACAAAACCTTTTAGTGT
TTGTAAGGGTCAGGGAGCCAGGGGACAGTCTGTAACCTCAGTTGTATATTGACACAGAGAATGTACAAAAGCTGTGAAAG
CTTCCACTTGAATGACTGCGGATGGTTGCTGGTGACGGTCTTGGACAGTAAGGGTTTTCTTCGGAGTTGTAGGAGGTGA
AGTCTTCTATGGGAAATTTCTGGACAAAATAACAAATGAAATGACTTGCAGGCCTCAGTTTAGAGTATTGTTGGCTTT
GTCGTCAACAAATGGAGATTTGAACATGGGAGTTCAAGGGGATTTAATGAAATTTTATTAAGGAGATGAGAAGCAGG
GAGTCTGTGTTGAAAATTCATAAAGGGCTTGTTTTCCATCTCAGCCTGGATAATCTATGTTATCTCTGAGTAAAGGGG
GTAACAATTTCAACAACCTGGCTTCTTAGAAGTTTCCATTCTCATATAGTCACCGAAGGCAGCAGCACTGTCAAATAA
ACAAAGGTTTAAATAAATAAAACTATTTAAACAGAGCAGAAATATTTCTCCCTGGCTAGTCACAGATTGGACAATTCA
AAGAACAACCTGGGGGAAATGGCAATGGATTACTTTTCTGTTTCTGTCTATTGCAACGTTTTTCTTCTGTTG
TCAAATCTCAAGTTGAATTCAGTCAATTATCTACAGCTCAAAAAAGATGCATAAATGTCTCTTCTGTACTGTTTATATG
TCACCACATAAATAAGCAAATTTTCTTCTCAGCTTCTTGCTTAGGATTTTATAAGTCCAACAAAACAAATAAAATAT
TATGTATATTCTATCGTCACATATGAAAGCATAAGGATTGATTTAGTTATGTACAAGTTTATTGCCAAAGTTTTTCTCG
TTGCTAATGTTACACTTGCTACAAAATGTATTAAGAAACAGACAATTTGCTAAGGATTTGGAAGGATTTGTCAATTGGG
TTAAGTACATTAAGTATCTAAGGGGTGTGGTGTCTGGTTATGTGTATGTGATGTCAGTTTCACATATTTTTTGGCTTTCTTAT
TTTAGTTGCCCTCTATAATCATTTTGACTTTAAATGTTTTCTGTCAGATCCTTTAATAACTGCAAATGTAGAAGTATGGT
GTAACAAGTAATTTGGTATGACTAACACTAAAATGTAATGGGAAATAAGGATACTATTGTAAAGAAAAACAAGAAAAACCT
GGGGTAGGGGAGCAGTATTGATTCTCTCTTAGGATTCTTAAGATTCTCTGTCCCAACCTTCTACCATGGAACATTCTT
ATGTGGTCTAAGTGTCAAAGACCAGAGGAACCTGGGCAGTAACCTATCTTCTCAATTTTCTCTCTGAACATAGATATTTT
CTTTAAGATACGAAAAACCTTTAATTTGTGCTCCTGAAACCCATCCCTGTCTCTCAGCCCCGTTGACTCTTCTTTCT
GTGGGTGGGTGAAAAGCCTACCCATCTGCAAAGGTAGCTCTGAACTGTTCTGGAAAATCCTGTATTTTCTCCACAAA
TGATCGTTTATGTTTCAAGTTTATTTTCAGGTACATTAATTTCTCCCCCTCCTCAGACTTCATAACAAATGATCCTGCACA
CGATTAGAATAGGAAAATGTAAATAAAATCGAAGCATATCTAGTTGCCCTCAGCGACTTTATGCTTATCACTTTTCAGTC
TGCATTATTTCTACTAAAAATAAAAAAGAAAGATGAAAATTACCTCAGGCGTTTGTGCGCGTGCCCTTTGGTTTCTG
GGACGGCTCGGGTCCCGTAGCGCCGSCACAGCTGAGATTGCCAAGCCGGAAGAGACCTTGCTCCAGGTGTAGCTGCGT
TTTCCCAGATCACCTGTCTTTTCCCCTCCGACAAGGAAGCTGTGATTTTCTCTGGCCTTTAGAGGCAAAGTGATTCT
CAGATAAGTAGATTAATGTGTAGAATATCTCATCTGTGTTGTTCCAGTGCAGCCCTTTCAGCTTTCAGAGCCAGTTAG

36/375

ACTTGTATATGAGGAGCTAAGTGATTGGCTGGCTCTGGAGCTCAGTTTCATAGATTATAGCCAGCGTACGAGAAGCACG
AGTCCTATAGTTGGCGTACCCTGAGGCCTGCCAGTTCCTGCGCTTAATGCATATGTAGTCGTAATTGAGTTCTGACACGG
CCTTGGATGTTTTCTGTCTTAATAGCTGACATTGCATCTTCAAGACTGTGTGAGTAATCCTGATATTTTTTTTTTAAGC
TCAGTAAATTAATTACATGCCCTGGGAGGGAGTGATTGTAAGTAGAAAACTGAACTAGCAGATGATTCGTTTTTAAG
GTGCTATACTATGTGTATCAAGTTCAAGACGATGAATCTTAAAGCTTCTAAGAACTGGCAGGGTTATTCCAGCTTTGTG
CCATGAATCACAGTCAAGCTGCATTTTGAAGGAGGCTGTTTGATGCAATTGCTAGCTCTGTTTGTGTTTTATGGGGTCAGT
AAAGTGGCAGAGGTCCAACAGGAGCAGGTTAAAGCAGGATGCTGGGATCAAAGCTTAGAGAGCACTTGAGTCAGGCAAG
TTTTAAGTTTTCCACCCCAAGCATCTCAGTCCAAAACCTGAGAGCAAGCAGCAAAATATTATAATAAATGCTTTGGGGA
CAGGGGTACACAGCAGATAGGGCACAGTAACAGGAGAAATGTAAATGATGGCAGCAATACTTTTGTCTTCACTGTAATCT
GCAGCCAATTGAAGACATACACTATGAATAACTAAAACATTTTTATATGAACAAAAATGCTCTTCACTGTTCTGTTTA
TGTGGTAGAGGGCTGAATGAAAAACCATGCGCTTGTGTAAAAAAGCCTTATAAAAAAGTACATTAAACACATACAGACA
CAACCATAACAGAAGAAAGTATGTGGATTGGAATTTGTGATTGGAGCAGATCAAATTAAGCCAGGGAAGCCGTTATTAG
GTTTGTATGATTGCTGGGGGGTAACCTTCTGTTGCTGACAAGGTTTAGGATAAAGCTGGAGCAGATTGAAGTGGAAAACC
AGAAAACATCAGCATTTCATTACCTTCTATAGCATACACTGCAGGGTAGAATTAATACTGAGTATAGACTGGTAAATGT
GAGCAGTTTACTGTTTGTCTTTTAAATCATTATTGATTTCCCTTAGCCTATCATAAAAAATAATAGGGCTTTTGCCTATG
AAATTAGTGCTTAGAAATATTTTTCTTCTCCCAAATAATTTTTTATACTTTTTCTCAATACAGCACAAAGGTAGGTCAT
TAAAAATAAAGGGGTTCTTTTTCAAGTTGCTTTTTGTCTAATTTTTCTCTTTAGACCTGTAGATACAAATGTATGTAT
TTGTGCTATGTATAACTCTCAAGCATAAATCATTTGAACAGTATTTAAATACAGGCTCCTGTGGCAAATATAAACTT
TTAATAGCTATAGTTGGCAATTACTTGCCAATTCCTATAAAAAATAACATTAGTGGCTTATTTTTGATTGCACCTAAACA
ACTGGCATGATTTAGCCAGTAGGAGAGAAATATTAGTTGTGTTTTGCATAATTTGTGTTTAGATCACACTGGAAATAC
AAAGTTTTGTGTTTAAAAATATTTTTGCTTTCTGAAATATTATCCCTTTTCAGATCACACCAATGAATGAAGTTTGTAG
AAAGAAAAGAAAGTAGCCAACGTAGACTCCTTTTCTGTATCAATCAAATATATGCAAAATACATAGATTTTTAAAAATG
TAATTTTAATACATTCTTTAGAAACACATTTACTTCTATGAAGAAACAGTATAATGAGTTTCAATTTATTGACCCAGAATA
GTGAGTTGATTTATTGAGTTTCTGTAGCCATAGACACGAATAGTAATGGTTGGCTCATTCTTAGCTATACATTCTTAAC
TGACTGTATTAGTGGGAGAAAGGAGTGCATCTATAAAATAAATATAATCCCATCCCTCAAGGTGGTCTGGAGCCCATCT
AAGAGTAAGAAGTAGTAGAGTTGAAGCTGCTTTATCTGAATCAGCTCCTGACTTCAACTCAGCTCCTCTTTTCTCTTAG
GTCCATGTGGCCCACTTGGTGTAGTATTCACATCTCCTTCCACCTTTTTATGCCTTCATTGTTTACATTACCTTGCTTG
GGCTCTTATTGAGATGAATCACATAAAATGCTTAATTATCAAACATTAATCAGCTGCCTATATAATTAGAGGATGTT
TAAACCAAGGCTCAAGGAAATCTGGTGGGTGTATACTAGGAGTATTTACGCTTGCATCGGTACTTTCTCTGGGAC
TTCCATCAGTTTCACTTCTCTGAGATGCCAGAGTCATATCTTACTTGTGAAAGAACAGAGCTTTAAGAAATGGAGT
CTAGAGGTGCCAGGTGCCAGTGGACAGTGGGCTGGGGCAAGGCATGGTGGGGAAAGCAAAAAAATCTCCCAACAG
CAATAGTTGATCTTTCTTCTATCCACTCCTCTCAATTTTCTAAAACCATTTTTGTCTAACTGTGGAAGTTCTTTTGCAG
ATAAGGTTCTGTAAACATATGCATATCTGCCATAGACAGATGGATTTGACGAAAGATGTATCCAAAAGGAATGTATCA
CATCATGAACCTTGCTAAGTGTTTCATGAATACACACTGGCATTGAGAGACTATTAACACTACCTACTGAAGCAAAGACAT
AAATCCAAATTGAAGAAAAATAATTTTTTGATTGAATTACATTTCCAGTGGGTTTTTTTTTTTTTGGTGAATTTTGT
TTTTTGAATAATTTGCTCTTCCCTCCAACGTTTTTCTGTGTTATATATAGGACTGATTTGATTTCTTCAGCTTGCCCA
AGAATTTAATAATTTACTTTGTGTTTTCAAAGAGTTGCTGTCTACCTTGAGCATGTTTTTAAAAAAGCAGAACAAA
ACGAATGAAACAAATGTCCCTCTTCCACAGAAAAAGCACACCACCAAGGAGTTAAATGCCCTACATTTCTTTAAGTCC
CTCCTTTTGTGGAGCTAGACACTGGTAGAAGAGAGCTTCATTTAATTTCAAGACAATCAGTGATTTCAACTTAACATA
TAACTGTGTTCTCTAATATCTGATTTCAAGAAGCAGAACATTTTGGTGAATTAATCTTAGAGTCAACGGGACCACGCT
CAGGCCATGAAACGTTTTCTAAGCCTCAGTCTCTATGTCTTTAAAAATGAAAATAATGATATATGTTCTGGTATTTTACT
AGATTGGTGAATATCCACATCACAAATGAGAAAGTGCTTGTCAAAAGAACATTGTAAATGTGTAATTTGTAATTTGTA
CATGTACACTATTATTATGACTGTAGCTCATCAGCTAGGGTTAGGACTCTTACTTCTAAAACATATTCCAGTCAATG
GACAAAACTTTTGAAGCAAAGAAAATCTTCACTGTTTGATCCTAATGTTATGAAGGCTTTTGGACCTTACATTTGTTTA
AGCTCCCATTGAAGCTCCCATTGGAGCTTCAATGCTGATCCATCTATTACTTGAGTATTAATAAATACCGATAGGTTTAC
TGTGATAAACGAATGTGGCATTGTATGTGAAAACATATTTAGTAAACTTCCATGTGCCATAGTCGTATAAATATTACAT
ATTGCAACAATTATCAGTATATTAATAAAAAATCTTTGCAAAATTTCAATTTTTAAAAATGGAAAGTATCAGATATATTT
CTTATTGATTGGATTGACTAATTTCTAAGCTATGTTTGCTTCCCTCAAACAGGATGAATGTTCTGTGTTAAGCTT
TCTTTCCACTTAGATACAGCACTAAGCCAATAGTTAGATAAGCATTCTTCCACAGCCTACATTTGGAGCTGCCAATGAC
GAAGTTTTAGAGGACATATTTTCTCACAGGAAAAAGTGGGTAGGAAATTTAGACTGACAGATGTTCTTGGGTTTTTT
TTTTTTTTTTAATCTGTCTTACTCTCATTATTAATTTTTGCTAAGGAAATAATTATGTAGGTTTTGAGGTGATGCT
TATTCCTAGTAGTCTTTTCTCAGGGATGCAATGAATGGTCAAATGACCTTCTGAATGATTTGAAAGATCAATTAG
CAGTTTTGAATCCCAATTTTTTAGGTGGTTCTGCTTCAGAAAATCATTATGCTTTTGGAAATAATGTCCATAGCTGCAT
CCTACATTTTCAGTGGTTTCAGCTCAGTCTGTGTTGATGTTTCTTAACAGCAATATTGGTTATGCTAAAGCAG
TTCCCCATTTTACCTGTTGAACCTTTTTTAAAGATAGAAGAAATTATAGAGGAATCACAATAAGTAAACGTATTTAA
ATGGAGTGGATTATCTCCACTTTTATCTCACACAGCTCACCAGAAATTCATGAGAGAACTTTCTAGGAATGAAACAAT
TTCATTTGTAGTAGTATTTGAAAACCTGGATCTAGGGCCATTGACCTGACTTTTTTGTGCTTTGGTGATTGGATAAGAA
CACTTCTTCAGTAATTTAAACCTATAGTGAATAATGTTTTTTTTTAACTTCTCAATAGGAATTTATTATTAGCAAAA
AATCAGGAGTTAGGTGCTAGAAACACAAAGATGAACAATACATGGTTTCTCAAGGAGCTTATAACCTACTAGACATTT
ATTTTCATGTTGGCAGAACTTTTAGGATAATTCTCAAAGAAAAAGGGTTATTATGAGGTTGCTACTTTTCTCCTCAAAAT

37/375

ATTTTCTATGTTAATAATGAAGGAATGACCAATCTGTAGTATATGCAAAAAGTACTGGGTAGAAATATATTAATTTTCT
TGGCTGGGTGTGGTGGCTCACATCTGTGGTCCCAGCTACTTGGGATGCTGAGGTGGGAGGATCAC'TTAAGCCTGT CAGT
TCCATGCTGCAGTTGAGTCATGATTATATCACTGCATTCCAGCCTGGGCAGGCAACAGAGTGAAACTCTGTCCCCACC
CACCCCCAGAAAAGAAACATAAAAAATTTCTTATAAAAAATTTACTTTTATAGAGTCTCCAGCCTTATTTAATTCAGTTAC
CATATTTGACAAATAAATGGTGGAAACCAAGATGTTACCAGGTTTAAAGTTTCATATACAGTAGAACTGTGACAGGAACCT
AGAGTACCTGGAAC TAGAATCCAGATCTCTGCCCTTTT CAGTTTAGGATGTACTGACAAATATATATTGCTACTTAAATTT
GCTAAAACAAAATTTATAAGCATCTATATATTTTGCAGCTAGGACAATTATCTACAAACATGATATTTAATGGAAGATA
TGGTAATAACATCTGAGATATACAATTATGTTATAAAATCTAAAATCAACAAGAAAGGAATAAAGTTGTACCATTCCAG
GAAATACATTTCCAGAGCTTTAGATATCCTTATTAGATTCTACATGTTAGTTTGGTGATGTTAACTGCCATAACATAT
AAAATCTGAAATCTTGGTTGACTTAACTGAGAAGTTTATTTCTCACTCAATCAAAGCCTAAAGTGAGTATTTCTTGATGGG
CAGATTCTTCTCATTTCATTCAAGCAGTGTTCTTGTGACTCCACTCTTANACCTTGTGTGCACNACCAGCTTCCCTGGTG
TCTGTGCTTTGGCAAAGGAGAAACTCATAGAAGTCTGCTCAGCTTCTATTGGCCAGAGCTTGGTCACATGGCCCCATA
TAGTGAAAGGGAAGCTGGGGCTATAGTCTTATTTGTGTCTGGGAAGAATAAAAAGTTGGTTTGGTGATTGTCCTTAGTTC
AGGCTGCTGTAACAAAGTATCATCAACTGGGTGTCTTATAAACAAACAGAAATTTATTTTTTTACAGTTCTGGAGGC
TAGAATCTGAGATTAGTGTGCCAGCCTGGTCAGGTTCTGGTGAGGGCTGTCTTTGGGTTGCAAGTGCGTACTTCTC
CTATTATCTTCACATGGCAGAAAGAGGGTGAGCTAGCTCTCTGGCTTCTTTTTGTAAAGGCACGAACCCCATTCCTGAT
GGCTCCACTCTCATGACCTAATTATCTTCCAAAGANACCATCTCCAAGCACCAACACATTGGGAATTAGATCTCAGCAT
ATGAATTTTGGGACGATATGAACATT CAGTCNACAACAATGATCCACTAAGCTATTTCTGCCATACCTTTTTTTCTTTT
CTCTTTTCTTTCTTACTGTTCTT CAGTATGTCTATGTAGAATCTATGCCTTGTAACCAATAAGGTAATGAAAAAATT
ATAATATTTACCATCTGGAAGAAATTAGGAAAATGATTTTACTTTTAAATTCTTGATCCATATGTTAAAAAATTTCCAA
GGCTATTAATAATATCACTGAACATTGTGATTATAGAGATTGCTATGATTTAATACTTATGTCTTATAGTGAAAAAGTAG
TCCTGGGATATTTTTCTCTCTTTACCTCACCCATCCTCTTCTATGT CAGGTATTTGAATCCCTTGCTTTGTAGTTTAT
AAAAAGNTGGGGAGAAAATGAACAATTGTCAAGGAAGATGAAATGGCTAATCAAATTCATTTCATTCTCCATAGTTCCT
TGGGTATTTTATAAACTTTGCAGTAAATGCTAACTTCTTATTGGGGAAAAC TGCTATAAAGTAAGTGACAGGTAGGTT
TTGGAGAAATTTTCTTGCATGGAGTTGAGCAAATGGTGCATCTAACATAAGCTTGGTTTATAGTTTCTGTTTTT CAGA
AGCTAGAAGATTTTCTCCACTCTGAACCTCTAGGGATCAACAAAAGTATTTATATCACAATAAAAAAACAACAGTT
ACCTCTCAGTAAACAAATTTTTTTCAGATTATCTTATTTAAAAAATCTCTCCAAATCTGTTAATTTTCTGTTAATAAAA
CATCAGTTTCAATAAAAGTCTATAAGCCTGTCAAACCAATTTAGTCTTTTATCTTGGATATAGTAGGTTAAAAATTTTT
TGTTGGGTGTTAAGCCAATAATAAACTCAGCTATTTTAACTTAAACCAAAATTTATTTTCTCTATAAACC AAATTTACAATC
AAGCTACTTAAGAAAATAAGACAACAAATAGAACTGTTTTAATCTTCATATCCTGACCTAAAAATAGAAAGCACGAAC
TCATGTACATTCTCATATTTATCTGATTAGACTAGGAATGCC'TAAAAAGAATTTTCCATAAECTCCATTACTTGTG
TTTATTTCCCTAGCTCATTTCCAAAAGCAATTTAAATACAACACC AAAAGAGTAAAATATCCTCAATCTGACATCTCAG
CAATCTTTTTATTTTGGTGAACTGAACAATAATAATAGGCACCTTGCAATCTTACCCTGAGGCACTGAAAACACTGAT
ATGTCTCAGTTTAAAGATTCTGAAGATTATATTCTATTTAATAGATATTTTAAAGTATATGTATTATTTCTAGTCTTT
GAACTAAGGCAGTCCACATATAGGTATAAAGTAATGCCCTCAGCATAGTGTAGCAATTTTGGTGCAAAGGTTGGTGCA
AAAGTAATTTGTGGTTTTTGT CATGAAAATGGCAAGAACTGCAATTTACTTTTGCATCAACCCATAACTCTGTGGTCTCTG
GAGCCAGACTGCCTGGGTT CAGATCCCAGCTCTGCCACTTAGTACCTGAGTTACTCTGGACAAACTAATTAATCTTCAT
GTACCTCCATTTAATTATCTGGAAAATGGGATAACAATAGTACCTATCTGGTTGGGTTGTTGTAGAGATTAAGTAAATT
AATATACGTAAAATGCTTTACATTTTACGTATATTAATTTCAAATTTGCTTCGAATGATGCATATCTCATAGTGCTTTA
TAAATGTTTGT CATCTTATTATTATTTGGGGAAC TGATTATTTCAAAAAATATATTTTCTAGATAGCTGAAGTTTATTC
AGTCAGTTTCAAACCTCTAGATATAGCCAGTTTTCATGGGTCTTTACAAAAGGATCCCTGTATCTTTGTTTCTTCTGT
TTTAGAGAGATTAATGGAATCTTCTTTTGGTGATACTGATTGAGGTGATACTGAGATAATTAAGAGGACATGAAGGGA
TTTAGGAAGAGTGTGTTGCCCCTGCACTAAGTGGCCAGACTGCTCTACTGCATCAGCCCTCTGGCGATGTTCTAAGGGT
TTGGACTTCAGTCTACTGCCTATACTAGTACCTTGCCTTTTAAATTTCTGCTCTATTTTGTATAGGCTGTAAGCAAG
AAAATAGCCTAGTTTCTAAAACCTATGTATAAAATGAGAGAATAGGTGTCACCTCAGGGTGT CAGTTCTCCCTGAGAGT
AAATAAGACGTGACTGCATTTTTTCTTCTGGGTGAGGGTTATGTTTTAGAGCAAGGGTTGGCAAACACTACTACTCTCTG
TAGGCCAAATCTGTTTTTTGTAAATAAAGTTTTATTGTAACACAGCCATGCTCATTTGTTTATATGT CATCTACTGCTG
CTTTCACACACTGTAAGGGCAGAATTGAGTGGTTCCCGCAGAGACCATATGGTCTGTATAGCCTAAAGTATTTAATATC
TGACCTTTTACAAAAGAGTTTACCAAACCTCTGTCTAGAGCTTTAAAATTTGACAGAGACAGAAAATAAATGAGATGTTA
CTACATTTAGTAGTCTCCACTAACCTGCCTATTCAATTTATTTGCAGCACCACATCCCTTAAATGTATTTTGGAGAAACA
AGAATTTATTG CAGTAGGCTATGTTGGATAAAGAACAACAGCCCTCAGTAGCACATTGTGAATATTAAGAGGTGGTGA
AGCTGTGATTGTCAAGCCAAGTTGTTTGGGAATCTTCATTTTAGTATTTGTTGCTCTAGTGTGATCAGTANATAACATG
ATGCAAAATTATATAGCTTTCTGTTGTGTGCTGTAGAATGTTGTTCTAGAGATACTACCAGTTGGTAGCTCCTTTTTTC
ATGCAATTTCAAAGTAAATGTAAATATGTCTGTTGTCCTTTTCTTTTACATGAAAACCTCCCCCTCCCCAACGCTG
TAAGATT CAGAAGCATAGTGTACAGAAAAGGATCTTGAACCTGGGTTTGAATCCTGACTTAGTCACTTTATAAAGGAGA
AACATCAAGTTACATTGCCACCGCCAGCCTCAGTTTCTTGCCTGTAAAACAGAGGTGGGAATCCAGGCTATGCTTGCC
ACAAAAGGAGGACCAATGAGACTCAGCATACTAGAAGGCTCTACAGCGCATATTATTACCTGTGTCTTTAATAATGTT
CTCGATTTGGTTCACTTTCTCTCATACAAAGATGTGTATGTTTATGGAAAAGAATATACAATGGATTCTGAGTGAACCT
AAAATTGTCAACTGCAGTGGGTATGAGTCTGCAAGCATGAAGGAGGCTGGGTGAGAAAGCCTCTTCAAACAGCATATGT
ATTCCTCTGGTGTCTGCTTTATTATTCACTTCTCTAATGTGAAAGTTTATGCTTTAGTGCAGAGCTCCTGGGAAATATG

[illegible]

[illegible]

41/375

ACTTAGCTGATTTTTGCCTGTGATGATAATATCCAGAGTGATGACTGGATTCTCATAATCTGCTTCTCTACTGTAAAGG
AGGGATTTTTTACCTGATAGCATTTCTCTAATTTTTACTTATTTTATTAATTTCTTCTATGCCAATTACTTATAAATTTTTGG
CTTATTTCTGATCACACTATACCATTTGTAAAACATGAAATTCAGTTGATTGATTGCTATAATTTTTCTCCCATCCATA
TTCTGGATGAATCAAAGATGAGGCTGGCAGTGTTCTTTCCCTTTGAAAACACTTGGTTTCATTTTCACAAACAGAAAAA
TTACATGGCTTCTGGAGACATTGATTGTCTTCTGGAAGGGTTGGACCTCCATTGAGAATCACTAATTTAACAACAAAA
GCCCCAGATCATTGTATGAGTGTGTGTGGGATGGGGAGGGGGAGAGAGAGAAAGAAGGAAAGAAATGGGTTAAAAATTT
CATTTTAAGGAATCATTTTATTGTTGGATTAGAAAACATAAGACTGTCCATAAAAAAGAGGAACCATTTCTAAAAATTTTCA
TAACTTGCTGTATGTGTGATTTTATTTCTTAATAAAGCTCAAGTAGTTTCTCATGAAAGTCAATGGATAGAGAGCCAT
TTCAGGACNTGTTTGAATTGGCAGTTGGTTGGAGTTTGGCCATGGCAGGAAAGGACAGCTGTTTGTGTGGGGCCCTTGT
CTCCATGGTGTGGGACAGCATCTTCAGCTCTTTCTGGGAAGACCTCAAAGTAGGAATAGACCAAGAAAAACAGCAAG
AGGGCATGACTGCATGCTGCTCAGATGGAATTCAGCCTGTACTGCTCTAGCAGAGCTTCTCCAGGGGTTAGAATGTTTT
GCTTTTATAGTCATCTGGATTGTTTGTACTAAGGGTAGAAAGGTCCAGCCTCACCAAGACCTCCCGATTGAGTCT
CTGTGGGGAGCTGCTTGGGAATCTGTATGTTAGAGAAGCTCCAGGATAATTGTGATGTGTGTGTGTGTGTGTGTGTGT
CTAGTGTAATAATGGTGAACAGTAGCACTGGCTGGAAGCACTGTAGAAATTGTGTGTGTGTGTGTGTGTGTGTGTGTGT
TGTGTGTATTGTGCAAGAGCTATGAGATAAGATCAGGCTACTGGAATTTGCCAAGAAGCAGCAGCGGAGACACATTAAC
TAGACGCCAAGGATGTGGCCATAGACTTTTCTAGAACTCCCTCATCTAGGGTGTGCACGTCTGGATTGCAGTACTAG
TCCTGATTAAATCCTGTATGCATAGGCTCAGTGCAGGCTGGGCTCCAGAAAAGGCCATCCACAATGTTTTCTTTTAAAA
TTCCATATACTATTTATCTTTGATTTTCTACCTCCTGCAGGAATCCCTAGATCCAACTTTCTTTGGTGAGTTTGCAGGG
GTTTCTGATGGTTCCTTGTTCACGGGTTTCTTCTTATTTTCTACTCCTTTTATTTGGAATGTCAACCTACAACTT
AAAAGATTGAGCAAACTTTGTAGGAAACTACAGAAGTTGGAACCATATGATGCTTTCTATTATATGCCCAAAGTCT
GTTGTATATGATGAAAAATGAGGTTTATTTACTTCTTGGTACACCAACACAAACACTCTCTAATGAGGAAAAGAACC
AATGAGGGGGAAAAATGCTGGATGCCAATGGATGGCAATGATTTATGGAACCTCTGGGCTCAGTGGTAGTGAATGATCATC
TTAAGGGAAGACACTATTCTACAGTTCGGTGTAGCTGGGATGACTTTATATCCTAGTTTGCAAGACAGTCCCTGGCCTCA
CCTGTTGAGCTGGTGTCCCATCTAGTTAAGATACCTTTCATGCTCCCCAGTGTCTGTTGAGATACTCCGTTTATGTG
GTCACCGTGAGGATAGGAAACAGAGAGAGGAGATTTTCTTGGATCACTGAATAGTACTCATTTTCATTATATGATTTA
TCCCATTCAGGCTCACCCCTAACATTTGAGGGCCAGGACAAGACCCCCCTATTCCACAACCTATTCTTCTCTTCTT
GCCCTGGCTCCACTGTGCAACTGGAGGATCCTTGTAAAGATGTGTGTGGGTGAGCCAGCCTGCTCATTTCAACTTTATTC
ACACCCACATCCACTAGCTGCCCATGAACACCCCTCAGGCCTAGGGGTGCGCACACCTGTGAGTTGATCTGCTTCGGGA
GGGTGAAGACACACCCAGGCCCTGGAAGCTGGTTTCGGACCACTTGGGGCAGGAAATCAAGGGTCATGAGTACTTGGG
GAAGAGTCTAGAAGGGAAGTTGTNCTGCAGGTGGGTATGTATCAAGCCCTGCAGACTGCTGGTCCATGGAGAGGCA
TGGCTGGAGAAGGGCAGGAGAGGGCATTCTGAAGCATCAGCCCCCTGATTAGGGATACCTGGCCCTAGAGTGGTCTGG
CCTTTTCACTCCTGCTTTTTCAGAGATCCTGCTTCTAACACATCCTTGAGCATCTCAGTAAAGCAAGCTTCTATGCCAT
TCTGAAGTGTGTTGGGTAAAGACGTTTCTCATGTGAATAATGCTTGGTACCAGACTGAGGTCCAGCGTATTCTTCATC
TGGTCTGATAGAAATCCCTTGTCTTTAAATGTATATATTTAAGGTAACAACCTCTATTTTGTAGGTGAAACAAAACT
TAAACTGTATCAGTTAATGTTTTTAAAGTCAACCAAGGGAAGGCACCTCTTCCAGTGTGTTTTCATCAATTGAAATCT
GGTGAATGTTTTTTTTGTTTGGCTGGTATGTTCCACCATGTGTGTGAGCATGAAGGTAGGAAAATGTTTGTCTCAGCCATT
CCCTCTGTGGTTTTGTTTGGAGAATCAGTCAAATGGAAGGCTTTCTCTGATGTGATTACAGAATCAAATATTTT
ATAATTCCCAGATACCTCTGAATCTTGAATAATTATTAAGTCAAGTGAACACTTTCTCTTTCTTTTCTTCTGACTCCCTT
TGGATTGAACTAGCCCGCAGGGCAACACAATATTATTTCCCTGGGCTAGGTGCACCTTCTCTTCTTCTTCTGACTCCCTT
GCCTGTAGATAGAGTCCCTGTGCACAGCAGGAGGATGTGCACCCGATAGTCTGGAGGTAAATTTACCAAGAGTATA
AGTGGGATTGTGCAAAATGGTAGCCCTGCCTATGCATGTTTGGGGCAGGGATTCCCCCAACTGTGTATTTCTGAGG
GCCTGATTTTCTCTCTTTCTGTCAACCATCATATAGCATATGAGAAGATGGATGTTTGAAGGGAAAAATAATGTTATT
TTCTGCAATTTCTCCCATTTTGTGAGAGCACTCATTTCTCTTCTAATATTAATTTAGATCAGGGAAAAATAAAGCCATT
TGTTAAAGAACTAACTATTATATAATAAATTATCAAAACAATTACGCCAAAGGTATGTTTACAACTCCTGTTCTATCTT
GGTGGGTGATTAGCTTCTTGGGGGGTCCAAACAGCTATGGCTTTTCCATTTTTATAAATGGTTCTGCATTTATAAAAA
TTAAGAATGGACATTTATGCTATTAATTAAGAATGGAATTAATAGTGTAAGGAGGATCCTTCAAATACCCATGTGTTATT
GCTCAATTTTAAACCAATAAATCTTATACCAGAGTGTCTGCTGCTTCCGGATGAGCAAGGAGACTTGTGGTCTGGTTC
TTGGACTTCCCTAGCAGCATGGCCCCCAATGCCAGTCTCCACTCCTGCTCAAAGAAGAAACCAAGATGCCTCCTG
CTCTGGGACCGGAGGAGACATTGGCCTCTGCAGGCTTGTGAGGAAGGGAGAAAAAGAACAGCAAGAAGCAATGGAATG
CATTGATGAAGTACAAATGAAATAGACAGACTTAATGAAGAAGCCAGTGAGGAGATTTTGAAAGTAGAACAGAAATAT
GACAACTCTGCCAACCATTTTTTTCAGAAGATGTGAGAATTGATCGCCAAATCCCAAATTTTGGGGTAACAACATTTG
TCAAGCATCCACAAGTGTCTGCCCTGCTGGAGGAGGATGAAGAGGCACTGCATTATTTGAGCAGAGTTGAAATGACAGA
ATTTGAAGATATTAAATCAGGTTACAGAATAGATTTTTATTTTGTATGAAAATCTTTACTTTGAAAATAAATCTCTATCC
AAAGAATTTTCTGATGAGAGTGGTGTATCCATCTTCAAAGTCCACTGAAATGAAATGGAATCTGGAAGGATTGGA
TGAAATGTTTCTGGAAGGATTTGATGAAATGTTCAAGTCAAATGCAGAATAAAGCCAGCAGGAAGAGGCAGCATGA
GGAACCAGAGAGCTTTTACCTGGTTTACTGACCATTCTGATGCAGGTGCTGATGAGTTATGAGAGGTCACCAAGAT
GATATTTGGTCAAATCTTACAGTACTTGGTTCCTGATATGGATGATGAAGAAGCAGAATGAGAAGAAGATGATG
ATGATGATGAAGAGGAGGAAGGATAAAAAAGATACTAATGAAGAAGACATGAAGATGAAGGTGAAGATGAAGATGATGA
TGAAGGGGAGGAAGGAGAGAAGGATGAAGGAAAAGATTACTAGAACACTGATAGGTTCCAACTTTCTGTTTAAAAAT
TTTCTCCAGTCCCTGGGAGCAAGTTCAGTCTTTTCTTTTCTTGTGCTCTGTTGCCCTGTTGTGAGGTCTCTTT

42/375

GCTCTACACCATGGTTCTCAACTTATTGCAGAATACAATGGGAAAAGTGTCTCTACGCCTTTCTGTTTGAAATTCATTT
TTATCCCTTTCTGTCTGAACAAAACTGTATGGAATCAACACCACCGAGCTCTGTGGGAAAAAGAAAAACCTGCCTCT
TTCATTCTGCTGGAAGCTGGAGGGTGCTAGGCCCTGTGTAGTAGTGCATAGAATTCTAGCTTTTTCCCTCCTTTCTCT
GTATCTTGGGCTTAGAGAGTACACGGTGTCTCTATGTGAATATGGACAGTTAGCATTACCAACATGTATCTGTCTATT
TTCTCTTGTTTAAAAAAGAAAAAACTAAAAACAAAATGGGATTATAGAAGGTGAGCAAGGGTGGATCTGAGATGT
TTGGGTAGGTTAAGTGGGCATTTTGACAACATGGCTTCTCTTTGGCATGTTTATTGTGATATTTAACAGGCATCTTTG
TAGTTTAAGATGACACTTTTAAAAATAAATTATCTCTAATGATGACTTGAGCCCTGCCACTCAAAGGGAGAATCAGAAG
AACCTGTAGGATCTTATTTGGAATTGACTTTCTCTATTGTAATTTTGTTCCTGCTTATTTTTAAGTTTTCTTTTTGTTT
CACTGTAAAGGAAAGATGATGCTCAGTTTTTAAACGTGAAAAGTACAAGTTGCTTTGTTACAATAAACTAAATGTATAC
ACATACACACACACACACACACACACACACACACACACAACTTATACCAAAATCACACCCTTTAGTTAGTTGTCCA
CTGGAAAGGTGCTCTTTGTTTTGAGCTTCAAAGAAGCTCGTCTTCTTTTATTTGACTGTGCTGCTGCTGCTGCTGCTGCT
CAGGAATGACTATTCTGATATTTGCTTGTACATTTTGGTTTTTCAGAGGTGGCATATTGAGGAGGTGCATTTATGGAT
TGCAGCATAAGTATCCATGAGTCCGGGTGTGGTGCCTGTGCTCACTCATTATCTTGATGTGCTGCTCACTACCAGCTCT
CTCCTTTACACTATTGGAACTTTTATTCTTAATAATTTAATTTATCCCTAGTGACTCCAGCCTCCCATGACAGACTAA
AAAACCAGACTTGATGAAGTCCAGATATATTTAATTCTCTTCTATCAAGCCCAAGGGAGAATTTCTTAGCGACTATGC
TGACTTATGTCTTGAAAACTTTAACTTTGGGAATTTTGATGTATAATGAAGCCAGGAGAGGGAGACGTGTCAATCCA
AAATGCTGCGAATAGAATTTAAGCAAGCAACATGACACACATTCTTTGTTTCTTTTGTCTTTTTTTTTTTTTTTTTT
TTTGCAATGAAGTCTCACCTGTTGCCAAGCTGGAGTGCAGTGGTGTCTATCTCGGCTCACTGCCATCTCTGCTCCTG
GGTTCAAGTGATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGACTACAAGCATGTGACACCATGCCAGCTAATTTTTT
TGTACTTTTAGTAGAGATGGGGTTTCACTGTGTTGGCCAGGCTGGTCTCAAAATCCTGGCCTCAAGTGATCCACCCGCC
TTGGCCTCCCAAAGTGCTGGGATTACAGGTGTAAGCCACTGCACCTGGCCATGACACATATCTTAGCTATTCTCCAAA
AGGGAGAACACTAGAAAAGTGGTAATTTGAAAATAGAACTGTCCAGTAGCAACTGGATGGCTCATAGCTCCAGTGGTT
CTAATAAGCGCTCAGTGGAGAGTCTGATACATATTAGGTGCTCAAGAAAATATTTGTTAACTGAATAAAACAAATCAATC
GGATCTTGTTCAGAGAAATTTCAAAGCAGAGAATATCTGCCACAAGTGCTCACATCAACCATGCCTATTAAGCAGCACC
ATGTTGTTTGTCTCTCGCAGAAAGGGATTGATTGGCATTGCTGAAACAGGCCCCCATCTTACAGACGGCATTGAGAC
TCGGAAGAGTTAAATAATTTCTCACAGCTACTAAGCACTAGAATAAGAATGTGTGCTTTCTGACTCTGAGTC
TAGGATTCTAGGACTTCAAGGGTTTCTATCTTTTTGAAGTCATGGGGCAGAACAATATAAGGAACAGCTGGAAAAAC
TGAAATGAAATTACTATTCTCTTACATAGGAAGAATAAAGATAACTCTTGAGGGCCCTGATATATTAGTAATAAAA
AACAGACTGAGGTAGCAGAAGCAGATGGACATGCAGGGAACACTTCCAAACATCCTTCAAAGGCCTAAGCTTAAGG
ACAGGAAACATGAGGAAGCAGAGAAGGAAGGAATGTGTCTAAATCTTCCAAGCTGTTTCTTTTACTATTACAGGCCAA
GCCTTCTATCTCTTAAATCAAATTTTCAAGGAAAGCTTATGGCAGATGAGACTTTTGGGAGTACATTAGAAAACAGGAG
GAAAAAGGCCTTATTACTCACTGATTTGTATCTTGTGTTATTTTATAATATTATTAAAGCTCTTTCATGTTATATA
GATTCGTCTCTCAGCTGTACTGCAATCTATTAGGACAAGTCTCGTCTCTTTTATGTATTCTTCTACTGTGTCTATA
TGTGGTGGTCTCTCAGTCGAGCAGGCTGTACAGTTTATTGCAAGTGTTCCAAGGAGCTTGTGTGCTTCACTGCTCTGA
CCTCATTTTTGCAATGTTAATTAAGTTGGGTAGATGACCTATTGCACTGATAACACTCACTAGCTCACTAGTATATGGT
AAGTAGTTTATTCTCTTAGTTAGTTGACCGTGACCAGATTAAAGCCCAAAAGACAAGAAAAAAATCAGGTGGTAGAG
AGTGGGGAACAGAGGTATAGGACACTGTTTTGGGAAAGTGGATCTTCTTGTGTTCTTACAGAGGATAACTCGGGCCTGT
CAGGATGAGGTATTACAAGAAGAGAGAACAAGAGNGGAGGCTCACCATTAAATTTGGCTTCTGGCCTTGGGTGAGCCTT
GCATGATGTTTTGTAGACTGAGAGTAAGGAAGGAGAAGTTGAGACAAAACCTTACTCTCTGTTTGGTCACTGAGAGTA
AAGTCTCTCTTGTGCTAGCTTATTCTTAAGCAGTATGCATGAGGCATTTAGGGGTTTATGTGCTGAAGAAAATTCATCC
TCTGTGCTAATTTGGCAGGGATTCCAAGGGATTAAACCAAAATCATTGACCACCTGAGTTACAGTAATTTTAGAGC
TTAGGTTGTTTATTCTTACGTGTATAGCACAACCAATACTATTGAGTCTGGCTGCATGGAATGAGATATGGCTAATTAG
ATTTCTGCTAACCAGGTTAAGGCAGAAATGCCATGTTAACAGTAGCACCTTAAACCTGGGGAAAGAGGCTCTTGC
CTCGTGTCACTTGCTTTAGAGGGCCCTACTGGTCTTCTTCACTTGCCATGCTTATGGGGAGACGATTCTGCAGAGC
CATGTGGATATTGTCAATCCAAAGCACCCTTCCCTCTTCTAAACCACTTGGTACCCCAAAATCTTACCTAAGTGAT
CCCAAGATGACTTCCAGGGCTACGTGGGTCTCTCTTGAGTTCTCATCTCCCGAAGGTGAACGTACCACTTGTGTTGA
GCACTCCTAGGACCAAAGAGTGTGGGCTGTGCATGAATCTTAGATGTTTGGGCTGAGATGTCCTTGGGGGTGTGTGCA
AGGCCCCCTCACTGCAGAAAAGAACTGAAGGTGGGGAAGAGAAGAGAGTGGGCTACTGGCTGGAGAACCCTGGCT
CCAAAAATTTTAGGCATGGGCTGACATTTCTAACTCTCCAGTGGGAAACCATTTAAAGCAGTCAACACATTGACTACGA
AGTGCAGGCACTACTTTGAGTAAGTACTAGACTTGATCGCAGAGGTCTTGAATGGCCTCCTGGTCTGCATGTGTAAACA
GTGGTTATTGTTCTCTGACTCTAATGCTGTAGGTACTAGATGTGACTGTTCTCCAGAGACATTCCTAGGGAGTTGCTA
ATGGTGGTGGTGGTAATTGCTATTATTATTTTATGAACATTGAAATCTTTTATTTTTTTGTAAAGTTGTCTCCTTGAAT
ACTGGACTGTAAAGGTGTGTGGATGTGTTCTAGCAAAATTGAGAATTGTAGTTAATTGAGTTCTGGTTATTTAACTTTTT
ACTGTAGTTTGTACTTGTGCTTGTTCAGAGTCTAGGCAATTTTACATGGGCTTATTTTATCCTTTCTCCCTATCTCCA
TTAGTCTTCAAGATCAGGAAAATGATTTATGTCAATTTTAAATAGAGCCTTCTCTGTCTCTCATTTCCTTCTCTCT
CTCTCTAAGGTATATTATTGCCTACTATATCCTGTGCCCTGTGCTGGAATTTCTCTTGTGCTAATTTTATTGATAACA
TATGATGGCTTAAATGTCTAGTGTTTAGTAAATTCATAATAGAAAATAACTTTGTTCCCTCACAAATTTTACAG
ACATTTAAATTAGCACTTCAATATCCAAGTATTTTGCTTTTTCTTTTCTGGAGAGAACTAACACCTGTAGGTATTTG
TTGACATGCAAAAATGCATGCAAGAATTTTAAATTTTATACCCTATAATTGGTTGTATACTATTAATTAGACCTCTT
CTTAGCTCTCTTACTGTATACACTCTTCTGTTTTCNCAAATCTCTCCTCTTCTCTAAATTCCTCACCTGTTCCCC

43/375

ACCCTTTCCCTGCCTTGTCTCTGGGTTTTGTCTCTCTTGCCTCATTTTTCTCTCTCTCTCACTTTCTTCCCCCA
CCCCTTCTCTCTTGTGTTACACTCCCCGCTCATGTATGTGCCGCTTCGTCTTTGTGTTTATATCTACCAGGGGAAAGACC
AACCATCTTTTATTTTAAATTTTATTTTACTTTAAGTTCTGGGATACATGTGCAGAAATGTGCAGGTTTGTACATAGGT
AAATGTGTGCCATGGTGGTTTGGTGCACCTATCAGCCCATTACCTAGGTATTAAGCCCCGCATGNGTTAGCTATTTATC
CTGATGCTCTCCTTCCCCTCACTGCCTCCCAACATGCCCTGGTGTGTATTGTTCCCTTCCCTGTGTCTATGTGTTCTCAT
TGTTTAGCTCCCACTTACGAGTGAAAACATGTGGTGTGTTGGTTATCTGTTCCTGTGTAGTTTGTCTGAGGATGATGGCT
TCTGGCTTCATCCATGTCCCTGCAAAGGACATTATCTCATTCCTTTTATGGCTGCATAGTATCCATGGTATATATGT
ACCACATTTTCTTTATTACGTCTATCATTGATCGGCATTTGGGTTGATTCCATGTCTTTGCTATTGTGAATAGTGCTGC
AATAAACATACGCATGCGTGTATCTTTATAATAGAATGATTTATAATCCTTTGGGTATATACCCAGTAATGGGATTGCT
GGGTCAAATGGTATTTTCAAGTTCTAGATCCTTGAGGAATCACCACACTGTCTTCCACAATGGAACCAACCATCTTTTAA
AGTAACAAATGACATCTAAGTGTGAAGTCCGAAGTCAAAGAGCTAGAGAGTCATACAGTTTTCAGAGTTGTGCGAGTTT
GATGATTGATTCTCTGGCAGGGTCGTCTCATTTTGTACCTGAAAATATAGTTCTAGTGAATTATATCACTTGTCCAAG
CCCACACAATGACCAGGCTTCTAGCCCTGATTTATCAGTCCAGTCTTTTCTTAAAAATAGTTTCTGAATATATGCAG
GTAAAAATAATAAATAAGCCATCATAAGTTACAGACATGTATGTCTGCTTCTATGGTGCCAAGGAAAGAAAACAAGGGG
AAGGCATGAACATAAAATAACACAGGTGCACCTTATACATTGTTTCTTCAAAGATCATGAAAGGATAGCTTAGAAATTG
CCAGTAAGAACTATGACAAACAAGCTCAGACAAGTTACTGCAGAGAGGAGTGACTTAAAGTTAGAAAGCGGGAGAAGT
ACACTTGTCAACAGGCAGAAAAGGAGGAGCTATGGACCTTACAATTGGAATGTGATTAAAAAATAACGAAGCT
GATCCTTCTTGATTTTTCTTGTGTTTGAATTTATGGCAACCAGTACAACAAACCTATTTGAATGTATAAATTAATA
GTATACTGTGATTTACTTGGGCTAATATAAATGTAAACCCCTTTAAGCTAGACCAGCTGTAATTATATCCCAAAGATT
TGATTTTTATCATTATTTACAGCTAATAAGACATTTATGATCTCTTTTGGTTGTCTCTGTTGAAGCATTGTTGGCAAT
GCTTTCCTGACTTGAAGTTCTCATGTGTGTTGAAATCGAATTAGGAAAATGAGTAAGTAAATAACTTATCCTAAGAGTA
TAATCTCTCCTTTGTGACATAAATTAGAAATCCATTACATCTGTGGAATAATTTCCAGGTTTGGCGACTACACAATCTG
ATATGCACAAGCAAACATGCCAATCTTTTCTCAGTCTAGGAGAATTTGGTCACCTTCTACTTGAACAAAACAAGCTATA
TGTGCTTTTTAAATAGATGATCATTCTTCAAAATTTGGATTATAAAGAGCTGATCTGAGCTGCAATCAGATGGATAATT
AAACAGCAAAGGTAAGAGGCTTCTGACTGCCCATGTTTACAGTGTTAATTGAAAAATAAAAAATGATTTTTAATCCT
AAAGGTAATTTGACCAATGCACATGTACAATGATGTAAGGTTCTCTCACTTTCCATTTTAACTCAGGATTTGTGGAGGC
ATTTGAACCTAGCTTTTCTCACAGAGAATGGAAGAAGTTTGACTGGAGAAATCTGGCCACATTTTACGTTTTTCTGGGGT
GTGTATAGTTGAATGAAAACATGAAGATGCTACTTTTAAACAATTTTTTAATTTTGTTTTTTCTTCTCCTCAGCTATGAT
GCTTTATTGTCTCAGATCTGTTTAAATCACCTGGAATACTTTTTCGAGTGATTTTTTAAATGGCAAGAAATGTTCCCTTT
TCCATAATGTAGCTGTTGCCCTCTGAAATGCCATAGGTGTTTGCATTTTTTAAATCCTCATTGTGGCAGTTATTACGTT
TTGCTTCATGTTATGGTAATTTGGCATGCAACATATCTTTTGTACCAATTTTAACTCTTTGAGGACAGGGTTTCTATA
TCATTGTCTTCTTTACCCTGGGCTTTTCACTGGGTTGGTGAAATGTTTGTGGAATCGGTGAATGAAGATAAGACATACA
TTGTCTTCTGAGAGTGGGCAGACATGTGGCGGGCTATTGCTGGATAATGTGCTCATAATATCCTGCAGATTAATTTGGT
TCTTTGATGGAATGAAGTGAAAACATGCATCTGCAGTCCAACCTTTTCCCAATGTTATTCAAAATGTAATTCAATGT
GATCAATTACATTGAAAATAATTGAGAAATGAGATGACACTTAAATTAGTTGAAGACAATTGTGGATTTTGGCCCTTGGT
TCTTTGGATAAGTAACTTTTAGTGTTTTCTCAGAGATTTACAAAATTCAGGGGCTGTGTATTCTTGCCTATAGGACA
TCCAAATCCTGAGGCTTTTCTTCTTATCATTCTCATTTAACTGCTTATTAATCTTTTCCAAGAGAAGGAATAAGAAAC
ATGAATTTTGTCTGTTAATTGAACCATCCCTTAAACTGTTTGGACTGTCTTTTGGGCTATTGAGAAAACTATTTGGT
CACTTTCTCTGTTTTTTTGGAGAGTCCAGGTAGAAGAGGTCTTTATTATTGTCAATTACATAGTTTATAATAATTTCTG
TTTCACTTTTACGTACATAACTTTTCAACAACTGGCAAAACATCATCCAGGCATTCTGGTCAGTAAAGATCCTGTA
TCAGTTGTGCTGTAAGACATTATTGAGCCGATAAGTAAGTGGTCCAGTTTCCCCCTTTTGTCTCTGTAGAGAGTTCCGG
CAGCATAGCAGAGGGTCCCATGGAAGTAGGAGTAAAGGAATCTTCTTTGGCTTTTAAAAATCTCTCAACTCCATTCT
AAACTTCTGCAAGTTTTCTCCTTGGGAGATATGGAGTGGTTTCCAACATCTTAAATACAGTTGCCTTTTGGTCAAATT
CCACCTTTAATCCCTTCAAGAATGGGAAAATAAAGACATCTATTATGACGTCCTTAAAGGCTGTAGTTATTGAGAGAG
CGGCCAAGACTAGAATTATAACTTGGGCCCTCTGCTATTATGAATATATTGCTTGTGTGAACCTCACTTGGAGTAAACTT
GTGTTATTATAGAAGTAGCAAAGAGGCCAAAAAAGAGACAGGGGCAAAAAAGACATGATCATCAAAAGAAAAGATAAAT
GTTTGAGCTGATGGATATCCCAATTTTCTGACTTGATCATTATACATTGTGTACAGGTATTTAAATATCACATGTACC
TCCCAATATGTACAATATTACATGTCAATAAAAAACAGTTTAAAAAGTGATCAAAAAACAGTAGCAGAAATATATTCTT
TATGTAATTTTCAATCGCATTTGAGCATCTAGGATTTTTGACAAGACACTGGGCTTCCGTCTACCATAGGGTGCTTAGGA
GGCCTAGTGATCTCCAGAACTGTGGGGTGTGAGTTCAAGAGTCTGCTCCAAGAATACATTAAGTGCTTACTTAATGCAG
AGCACTATCTTTAATGCTTTGAAGATTATAAGTTCTATTTTTGACCCATCTTCTATGTTGGGCCATTTATTTTTATGAT
TTTTGCTTCTGCTTTGTCAATTTATATGTAGGCGACAGTAATAGTAATGGCCTGGTAACCTTACAGGGAAGTGCAGGTTG
ATGGTGGGGAAGCATCTTATTCTAATATACCCATATAAAGACATAAAGATAGCATTATATATTTGTAGTCAAATCATT
GGTTCATCCTATTTTCTGCAGTTGAAGATAGATATCACCATGTATATGGCCAATTATCTTTATCCAGTTCAATTTGGCC
AGGTCAATGAACTTGTATTTATGTCTACTCTTGTGTGATGGGAGATAGAAGAAGTATAATAGTGGCCCTAATTTACT
TTTGGTAAATTTGAGGTTAAGTGATTTTCCCAAATTTATTTTGATATAAAGTAAATTTGCAGATACAAGTTTTTTGGTCT
CTAAGCTTGTGTTATTTAATTGTTCCACAAAGAAATGCTGCATATTAAATTTATGGTTTTTAAATGGCTCACTCAGCCCT
TTTGTCCCTCCCTTCTCAAGTAAACAACTAACCCCTATTTTTTCACTTTGTTGTGAATTCACTTTGTCCAACTAGGC
TGGGGATAGGTTAATTAATAATATATAGTGATTAACATGGGGTTAGAATTTATGTGAGATTGGGGCAAAACCACTT
TTGAATACCTAGAAGATAGTGAAATGTACTTAATACTAACATTTGTGATGAATATCAATCACAGTTTTAGAAGTCTTTTG

ATATATATATAGCTAAATATGGGGTTGAATCCCCACCAATCATATCTTAACAGATTTTTTTTAAAAAGCTAAGTATCTGAA
TCAGCTGCTTTATTTTATTTGTCTCTTTCTCATAAAAATGACAAAAATATGGTATGTGAACCTCTGATTATTTTGA
TTCCAGTTAAACAGGATTTTACTTTAGTTTCTTTTTTTTTTTTTTACTGAAAAAAATTTTATTGACTTGTTTTTTGGTG
TATATAGTTCTATATATTTTAAACACATGTATACATTCATATAACCATCACCACAATCATATGAAAACCTCTTTTATAAAC
CCTCAAACCTCCACATATGACTTCTTTTTTTTTCTTTTTATTTATTTATTATTATCATACTTTAAGTTTTAGGGTACAT
GTGCACAATGTGCAGGTTAGTTACATATGTATACATACCATTGTGACGCAGCCATCCCGTCACTGGGTATATACCCAAAG
GACTACAAATCATACTGCCATAAAGCCAGGAGAATTTCTTGAGCCCAGGAGTTAAGACCAAGCTTGGCAATATAGCAA
GAGCTTATCCCTAATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTATTTATTTATTTATTTATTTATTTATTT
CATGTGCACAATGTGCAGGTTAGTTACATATGTATACATGTGCCATGCTGGTGCCTGCACCCACTAACTCGTCATCTA
GCATTAGGTATATCTCCAGTGCTATCCCTCCCCCTCCCCCACCACCAACAGTCCCAGAGTGTGATGTTCCCTT
CCTGTGTCCATGTGTTCTCATTGTTCAATTCCCACCTATGAGTGAGAATATGCGGTGTTTGGTTTTTGTCTCTGCGAT
AGTTTACTGAGAATGATGATTTCCAATTATTATGAAGAGAGAGAATAATGGTTTCTCACTTTTCAATTCCATTTAGAAG
GAGGTTGTTTCTTTCAGAACACCAAATGAAGCTTTCTCAGTGGCCATCCTATAGGACCTTTCGACTTGAATCTCTGGTT
TCTGAATTTGGGACATTTTAAATCCTAAGATTTTTCCAGGTGATCTTTAAAAATGGGATCTAGGGAGATTTTAGCAAA
TTAATGGTTTCTGTGTTAACTCTTTTAAACATATTTTCATGATCGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGCGNG
GGCAGTTGGGGGGTGGGTGAAGGGGATATGGGGAGAACAAACAATAACCAAAGAAACAATAGTGGAACTTAAAAATA
TTTTCTACTAACTTATTTGCTAATAATTATTTCAGGCAGCTTTATGAAAGCTCTTTGGAAATTTCTAGAAGTGTTCCTATT
TCAGGCTTAATATATTTGGATCATAAATAATATCAGATACCTTTTGGAGGCATTAGAACTAAACATTATGCAAAGGC
TACCCTCTGTTGCGTCAGGAGCTTGAATGTTTTTCATTAAATATCTGCTATGAAAGCACTGAGATTAGATGGGATGCT
ATCAAATGTGAGAGATTTGTATTCTTGGGTAGAACTGAGATTTTCATTTCTTCATCCCATCTGATGCTGGCTTCCCT
GAAGCAACACTCCTGTTCCAGATTTGTATGCTTGAGGTAAAGTCAGAAAAGGAATTTCCGTGAGGCATGAGTTTGTGAT
GAAACGTGGGGGAAAACCAAATGGACATCTTCAGAATGAAAGTGTACGCTCTTTGTCTGTCTGAATGTGTGAGAAAGAAG
AACACTGAACACAGTCTAAACCTCCTGCTGGTGTGATTATTGAGTAGTGTGATGAGGCCAAAATATGAATGAAGGTTTTT
CTGTTGCAAAATGCTTTATGTTATGTGCAGGGCAGACATCTGTGTGCCCTGCCTTAAATTTATGAACTAATAACATTCTG
TTCCAAGAAATCCTGTCAGGTCTTTAACGGTACCATTTTGTCTGAGTTATTCTGGTAAATGAATGATTTTGTCTTTTAA
GTAATTATTTTTTGAATTTTTTAAATATAAAGTCACATATGGTTTAAATGTATGGAGAGGATGCCTTTATCATCAATGAAA
ACTTTAAGAATTGACTGATTGCATTTTATTTTAAACAAAATATCATTCTATTATTTCTCTATTGGAACAGATGTAAAT
GTTCCAATCTATTTTGGATTCAAATGAATTTTGAATCAAATAGATTTAAAAATGAATCTATTTTGAATCAACAAAATAGA
TTCAAGCAAGTTTTATGAGTGAGATTACAGATGAATGATAATAAGCAAAATCATGAGAAAACCAACCCAAATAATTGA
GTTAGACTATAC'TATAAACAAAGTAAATTTAAAAACATATATCCTCAAAGAACTGTGGCCAGTAAGATAGATACTCTCT
GAGGCTACCTCCTAGTATAGTAACGGTAATTCTGCTGAAACCAATTAGGCAGCTGTTGAAAGCAACTTCTCGCTGCCGA
TGAAGGACTGGATCCTGTAGCTTGGTGCTCTGTCAAGTCCTCAGTGTGTACTCAGCTTGCCCCCTGCTAATACACACT
GGTCTTAAATAAAAACAGAGTGGCAAATATTAGAGTGAGTTTTATGTGTCTTTGGGATTTTTCTTCCCCGCCATTGGT
AAATAGCACGTTTTCTCTGAGATCTGTGACCTTTGAGATAACTTCCCTTGTTAAACACACACTGATTTGTGTGGGTAT
TTGTTTTCTTTCTTTTTTTTTTCAAAGCTATCTCTCTTTCTACTTTATATTAGTTGCTTTCAACACAGAGTAAAG
TCTTCTGATGAATCTCTGTCTGTAGTTTGAAGAGGGGAGAGCAAAAGGAATTAGCAATCACAAAGATAAACCTGC
AAAGGCAAACTAAGTAGAAACATGTTTTTCCGTGCAAAATATGCTTAAGCTACTATAGGCTGTAATCCCTATGCTGACA
TATCTCAGAATAAAAATGTAAGTTGCTTGAGATGCTATTCTGAAGCATGTGATATGGTTTTATTGATTGATAAAATTTATC
CATATGATGATAGTTGTAGATTTTTCAGAGGCCCCATATGGACCATTGAAATGAAAATGTTATATTGGCAATGGATGAG
AACATGCCACTTGCCCTGCTCCATACAACTTTGATTCTAGCAATCAGCACATGTTAGAGAGCTGGAGGCCACGGTAT
GGTGTGCAAGTGCTCCTGTGCTGAAGTGACACCAGAACAATCACCACATTGCCATCAGGCCGTCCATCTGAGGTAGGGT
TTTCTTCTTGTTCATCTTTATCATTCTCGGAGAATTTGCCAAGGCCCCAGGGCAGTGTGAGGCCCTCCAGCGCCC
CCTACAAATCTCTTTTCTGTCCCTTCAACATTTTCAGGTCTAACTACCTGTAGTTTTCTCTCTAATTTCTGGGCCAA
AGCTTGGCAGGGGGCAGGCGCAGAATTAGGTTGAAGAGGCCAGTATGAGCAGGCATACCAAGTCCATTGTGCTATACC
AGAGGTGTTACATTAGACTAATGAAGGGATTATAGAAACTTAGCTCTCCATCTGAATTTCTCTTATTAACACATCACTGT
GAATCAGCCTGCTGCTTTCGGTGTGTGTGATTTTTTCCCTTGGTTACTTCTGTTACTGCTAACGATATTGGTATCATTT
GTTGTATCAATGCAACTGACTTGTACTTCAAATTAATATCTCAACCAACCTAGAATTTCTTGTCTAGCTATGGTAGGTA
GTATGGGGTGGTAGTGGTGTGTCTCAGGCTAGTATATGATAATATGATTTTGAAGTCTGTTTTCCCCCCCATTAAACG
AACTAGTGTGAACATCTATCCATGCCTTTTAAACACTTTTCTCCAAGATAATTTTTTATAGTTTTTAAATGGTTAAATA
ACATTAACCTTAGCCAATGAAATTTAAATATTTTGTCTACTGTAAAAATTATTGTGTATCTCCTGGTAGTTAAATCAGGA
TTATTTCTTATAGGATGCAGAGCTTGATGTGTTAAGGAGTATAGTTATTCATAAAGTTTGATTTTTTGGCCAAATTGCT
CTCCAGAAAGTTTTTTTCCCCCTTCCAGTTTATTCTCTTACCAGCAGTGCATGAGAGGGCACATTTTCCCGTATCTTAAGT
AGTGTGTGTTTTCTAAAAATGTTGCAGATTCATGATGGGGAAAATGGCATTTCAGTGTGGTTTTCTGTGTTTGTAAAGT
CACTAGTGAGGTTGGGTAGTTTTATCCTTGTCAAATGCGCTATCAATGTTCCCTACTTATTTTTCTTTGAGATGCTTA
TTTTCCAATTAATTTTACTGACAATTTTTATATAGTACAGATAGTAATCCATGTGTCTATAGGTTGTTTATAATGTAAA
TATTTTTTTCCAAGTTTCTTAGTCACTTTTTGACTTTTTTCCCTTGGGTATATTTTTACATGAGAAGTTTTTGTGCATGT
GATTGAGTCTTTTTTAATTGTGGTAAGAACATTTAACATGAGACTTGCCCTTTAAATGTGTTTATGTCTATAATACAG
TATTATTAACATATGGGCATAATGTTGCCAGCAAATCTCTAGGACTTAATCATTTTACATAACTGGAACCTTATACCT
CTGAATAGCAAATCCCCATTTCCCCCTTCCCCAGCCCCGAGGTCAGTGGTTGAGTCTTTGATGTTTTCTTTTTAAGTTT
CTGCCCTTGGAGTTAGTTTAGAAATGACTTCATCATCCCAAGATCACACACACTTTTCTCATATTTTCTTCCAGTTTCT

Fig. 6.39

45/375

TTATTTTACATGCAAATCTTAATCCATCTGGAATTTATTTTGTGTATAGGAGTGCAAGAATTTAACTTTATATTTTTTC
 TCAGATAGTTTTCCACTTGCCAGTGGAATAATGATTTGTTGAATAATCTATCCTTTGCTTTTTAAGTTTTACCTTGAAA
 AACATAATATAAAAATTTGGATCTAGTTTTTAATATAATTCATTGATTTCTCTTTTTGTTGGACAGCATAACATTGT
 TTTAATTACTGTAAATGCAGTTAAACATCTGATAGCTTGAATCATTCTTATCTTTTTCAAACATTTCTTGGCAGTTTCTT
 TCATCATCTCCTGACCAGATGGTCGTCTAATGTCTTAATTGCTCATTCTACCATTGGTCTCACTTGCTTCTAATCCAT
 TCACAACAAAGTTGGCTGAATTTGTTGTTCTAAAACACAAATTGGATCACGTTACGCCCTGCTTGTGTGTATACATACT
 TCCAGCTATTTTTATCAACTAAAAATGAGCCCTTTGCCCTATAACAAGATTTTAACCTGAAGTCCAAGCAATTTCTGAAC
 TTCAGAGTGTGTGTAGACACCATTTCCGGTGATTTTTTTTTTTTTTTCTGAGTAGAGGATTGATAGCATCATAGATTTT
 GAAAGAGCCATGACTCCAAAGCATTATAAACCTCTGTGCCACAGGAAGAAAGTCAGACCCCCAGAACGGCTTGTGAGT
 AGCAGGTCTCCCCCTGGTTGACATTTCTTTCTTACCTGCCTGCCCTCTCCCTGACCACTCTTCCACATCCCCACCTTC
 CCTCCTGGACTGCTTGCAATTGTCTATCCAGTCTGCTGTTTACACCCCAGTGCTTTTTTACATGTTATTCTTCTGTC
 CAAAGTGTCTCCACACATACCTCGCCCATCTGGAATGGTTCTTGTCTTCAAACAACATCAAAGAGCCTCCTC
 CTCTATGAAACTTTGTCTGATCCCCCTAAGCAATGCTGATCTCTCTCTTATTTTTAACCCTGTACTTAATCTGTAT
 TTTACCGTGACTCTTCTACTCTTCTCTCTACTGGTACTATAATATCTTTGGGAATAAGGACTGTGTTTTTGTAAACA
 CAGAGCCCACTGCCCTGGCATAGCATAGGCACTCAGTGAATGCTTGATGAACAGAAGAATGGATGCAACAATGAATGTA
 TGGCAGGACATAGCCCTGGTGAAATCACTGGCAGGGGCTTGTGTGAAGTAACTGCATAAGAAAAAACAGCATGCTGTT
 AGAGGTGAAGGGACCAGCTTTGAGTTTAAACAGAAGTAAGGACAGAATGGGTGAAGCCATAATGTCAACTTTGAAATATC
 ACCATTTATTAAGAAACCACATTTGAAGTTCTAGGATCCTTAAATGAAGGCGTTTTTACCACAAATACCTTTCTAAATTT
 CCTGGGGTGTTTATAACATGGAGGACCTATTTCTGAGCTACCAGAGTCTTAACACATACCTAATTATGAGTTGGTCAC
 CAAGAGTTATCAGTAATCACAAGTAATGAAAGCATGGCTTTGGGTGAGTGGGTGGGTAGGGTGGGTGAGGTGGGATATG
 CCATGTTTTGGACCAAAGCTGTCCACATTGATGTGTAGCCATTGTTTTTATGATTCTAGCACCCAGTGAGTGTGAGTA
 AATATTTGTGAGTAATTGAATGCTGAGTGTGTAGCTGGGGGTATGACAGCCAGCTAACTGTCTACTTTCTCAG
 CTCTCTGAGATGGCAATGCTAATTTTGTCTGGAGAAAGTAGCATCACTGTTTTACTTGGTTCCTCTCTTACTGCTT
 AATTTTAGCTAGTTCTTATTATTACTTGTCTTGTCTTACTTCTTGGATTCTTTATCGCATTACCTGTGGTGTCACTTCT
 GTCTTACTCTGGGCAATGAACCTTGTTTTTTGTGAGATGTTAAGTTTATCTGACATAAGCCGCTCAATTTCACTCCTC
 AAATTTCTTCTACATCAGCATTTCTTTCTCTACCTGGGGAAAAAGAACCTCTCATTTAAGTGTGCTTTCTCTTCTCT
 TAAATATTGCCTAAGCAACTTTTTAACTTTTAACTCTCTCATTGTCCATTTACCTCTTTCTTGTGTTGACACATTA
 GAATCTCCATCCTTGAAACAACCTCAATAAAACAAAAATTTTGTCTGACTTTACTAGTTGAATACCTTAACGTTCACTTTT
 CTTTTTACCTCCAACTTCTTGAATGACCTATGACCACTATCTACACCTTTTCTTACATACCTGAGGTCTGGAAATCTT
 TATTACCTGGTTTCTTCTCTCAGTCTCCAAATTATTAAGAAAGTCAATTTCTCAGTTTTTCAATTTTCTTCACTCTTGAT
 AACACTTGAAACCATTAAATTTCCCTTTATTTTGAATGGGCTCTTCTTAATGTCTATCACACTCAACTGTCTATTTG
 CTCGTATCTTTCTGTTTTATTTTCTGTTTCTTCCGTGGTCTCTTCTGATGTCTGAGAGTGGATATTAAGTTGCACC
 ATGCTCTGCAGGGATGACACCCCAACCTTAACCTTCAAGTCAAGGCTCTTCTCTATGTTTCAAGTCTACTGTTTCTGGAAA
 GCTCTACCATCTGCCCCACAAAAGCTTCAACATTAATAGAAATTCGGTATAATTTAAACAAAATTTCCACCTATATTTT
 CTTTCAAATAAATGTTTTAATTTGAAATATTTACATTAATGATGCAACCATTTTTCTATCCACCCAACTTGAGACCTAA
 GAATGAGTTGTTTGTGCTGATTTCTTCTCTCATAGCCAACCATTTCAATGTTTCTCTGATTTCTACTGTTACCCAGGCTTTGC
 TTTACATTTCCCACTTTTATGGTGCTTATCTAAACCTTACTTTTGGCCTTTAATATTGTATTGGCTATTTATTTATTAT
 TTTATTATTATACTTTAAATTTCTGGGATACATGTGCAGAACGTGCAGGTTTGTTACATAGGTATACACGTGTTGTGGTG
 GTTGTGCTGCACCTATCAACCGTCATCTACATTAGGTATTTCTCTATCCCTCCCCCTAGTCCCCCACCCTGACAGGC
 CCTGGTGTGTGATGGTCCCCTCCCTGTGTCCATGTGTTCTCATCGTTCAACTCCCACTTATGAGTGAGAACACGTGGTG
 TTTGGTTTTCTGTTCTTATGTTAGTTTGTGTGAGAATGATGGTGTCCAGCTTCACTCCGTGTCCCTGAAAAGGACATGAAC
 TCATCTTTTATGACCGCATAGTATTCCATGGTATATATGTGCCACATTTTCTTTATCCAGTCTATCATTGATGGGC
 ATTTGGGTGGTTTCCAAGCTTTTGTCTATTGTGAACGATGCCACATAAACATACGCGTGCATGTGCTTTTATAGCAGCA
 TGATTTATAGTCCCTTTGGGTATATACCCAGTAATAGGAATGCTGGGTCAAATGGTGTATCTGGTTCTAGATCCTTGAGG
 GATCACCACACTGTCTTCCACAATGATTGAACATAATTTACTCTCCACCAACAGTGTAAAAGCATTCTCTATTTCTCCAC
 ATCCACTCCAGCATCTGCTGTTTCTCTGACTTTTTTAATGATTGCTATTCTAATTGGCATGAGATGGTATCTCATTGTGGT
 TTTGATTTGCGTTTCTCTAATGACCAGTGATGATGAGCTTTTTTTTTCATACGTTTGCAGGGGGCATAAATGTCTCTTTT
 TGAGAAGTGTCTGTTTATATTCTTACCCTCTTTTTGATGGGGTGTGTTGGTTTCTTTCTTGTAAATTTGTTTAAAGTTC
 CTGTGATAGTTCTGAATATTAGTCTTTTGTGATGGATAGATTGCAAAAATTTTCTCCCACTCTGTAGGGTGCCTGTTT
 ACTCTGATGATAGTTTCTTTTGTGCTGTGCAGAAGCTCTTTAGTTTAAATTAGATCCCATTTGTCTATTTTGGCTTTTGTG
 CCATTGCTTTTGGTGTTTTAGTCATGAAATCTTTGCCCATGCTTATATCTCAATGGTATTGCCTAGGTTTCTTCTAG
 GCTTTTATGTTTATAGGTCTTACGTGTAGGTCTTCAATCCATTTTGAATTAATTTTGTAAAGGGTAAGGAAGGGGT
 CCAGTTTTCAGTTTCTGCTTATGGCTAGCCAGTTTTTCCCAACACCATTTATTAATAGGGAATCCTTTCCCACTTGCTT
 GTTTTTGTGAGGTTTGTCAAAGATCAGATGGTTGTAGATGTGTGGTGTATTTCTGAGCCTCTGTTCTGTTCCATTGGT
 CTATATATCTGTTTGGTGCCAGTACCGTGCTATTTTGGTTACTGTAGCCTTGTAGTATAGTTTGAAGTCAGGTAGCGT
 GATGCCTCCAGTTTGTCTTTTGTCTTAGGATTGTCTTGGCTATACAGGCTCTTTTTTGGTTCCATAAAGATGCTTTTC
 CTGGCTTTAGTTGTTTCTTCTCTAGGATATTCTTTACATCGCAACCAGAATAAGTCATCAAAGGTCCAAATTATGCCACA
 TTCTTGCTCAAAGATCTTCAATGAATCTTGATTTCTATGTGATAATGGTTAATTTCTACATGATTAACATGTACTCTG
 AAGCTAGACTGCCCGGATTTTGATCCTGGTCCCACTACTTCTAGTTTGTAACTTGGAAAAATTAATCAACTCCTTT
 GTGCTTTAGTTGCCTCGGTGAAAAATGGGGATAATCATAGTGTGCTTATAGGGTGTGTGAATAATTAATGATTAT

46/375

CCTGCACATAGTAAACAGTCAATGAATTTATGCTATTATTATTAGTCTGCTATTTGTGGGCTTTTCATATTTTGTCTCAA
 ATCCAACCTTCTCTTTACTCACTATTTCTAAACACATTGTGCATTTTTCATATATATGCATTTCAATATCTATCTTTT
 GCTTCCTCTGCCTGTAATACCTTTTCTACGCCCTATCTCTCTGTGTCTTTAGAAATTCTATCAGTTCTTCAAATGAA
 CCTCAAATAGACTTCTCCACAATCCTTCACCTATCATACCAGGATTGTTTATGTTTCTGAAATTTACAGCCTATCTT
 ATACTTTTCTGTTTACTTGATTGATTGTTGGCTTAGTTTAATTACACACGAAGAAATCTTGTGTTGCCTGATGGACTGT
 AAACCTCCTTGAAAACAGGGTTTGTGTTCAATTTTTTTTGTATTCTAAAGTAACAAGGAAAGTTCTCCAAACATAAATGTA
 ATAGGTATTTGTTGAATGAATATAGAAGGAAGGGTGTAGGTTTTGGATAAGAAATCATCATTATCAAACCTAGTCAAAAA
 TGACAAGAGTATTGTTTTGGATGCATAAGTATAGAATTAGTACCTCTCACTCATCCCCACTAAGACGTTTTTGTGCTT
 AGCTTGCTGCTAACTGGGCTCTGGCTGTTACCTCGCAAAGACTCTGAAGTAGGAAAGAGCTTGGCACATTTAGAAACTC
 ACAGATCATCAATGCTGTAGTGAGGTGAAGGAGGGAGAAAGTACCATGGGTGAAGTTAGAGAGTTGGAGAGAGATAGG
 ATAGGTCACTAGAACTTTTCAAGGCCAAGTTATGCAGTTTAGGGTTTTTTTTTTTTTTTGTGTTTTTAAACAATGGAAA
 GCCTTTGAAGGGTTTTAAGCTGGGGAATAAAAAGATAATACTTTACTTTTTAAAAATTGCACCCAGGATGGATGGAAGACA
 GAGAGTGGGAAGATGAGTGAAAGCAGAGAAAACAGTTGGGCACTCTTGTTAGGTGAGAGACTGCATGGCCGGGGCTCAAC
 TGGCAACAGTGGAGATGGAGAGAGGTGGGTGGAATTGAGATTTATTTTGAAAGTAGAATGGACAGGATTTGCTGAAGAA
 ATGTTAGGGAAGAAAGAAAGCAATTTGATATGATGTCTCAGTTTCTCACTCAAACATCTACGTGGATGTTGTGGCCA
 TATTTCTTATTTAACTTATGGATGAAAGAAGGTTTCATATAGCAGATAATTTCCAACAATCTTAGGCATCAATTTACC
 TGACAAATAGAAAACCTCTGATGCCATTTGGGATAGAATTGTTCTTATATGACTTCCAGAGACTGAGTCATTGTGGG
 TGCTTGTCTATGCAGTACTCACTGAGGTGTAGGAGGATAGCTTCACTGGAGAAGATATATCTTGAGGTGGATCTAGAATGA
 ATATCAAGCTAAATTTAAATTTAAGGATGGAATGAAGTTTATATTCAATTATCCACAGTCCATTTGTATCAATTTTCT
 TGGGATGTCTATTATCTGTAAAAACATGTATTTCCGCAGTTATAAGAGCTTTGATATTGGTGTGAAAACAATGGTCC
 CTAATTAAGCCATAAGGTATTTTGGGAATTTAAACAAATGTTTGGTGGTTATCAACTGGGAACTTCTGGAGAGGTGAAA
 TATTGTATCGGGGACGCATTGTTCTTTTTAAAGGCCACACGGTGTCTACTTATATGTTCATATCATGTACATAGCCAGT
 TCCTTCCTGGTGGACATTTAGGTTGTCTCAACCTTTTCTATCTCCAACAGTGCATGCTTGTGCAAGTATATCCGTAGG
 ACAAATCTTAAGGATAGAATTATTAGATAAAAGCAGTTACCAAATTTACCAATCTTCTTTCCAGAAGATTGTCTGGG
 AATGACTGCTTTTCTTACCACCTACCAACACAGGTGCTAATCTCATAGGAAAAAAATGCTACTTTGTTTTAATTTTA
 ATTCATGTTTCTTTTGTCTAGGAGTACAATCAAGCACCTTCTCTATTAATATGTTTATTTCTCTTCTCACTTTTAAC
 CATCTTCAACCTCTACAATTATGAGAAAGTAATGACTGTCAAAAAAAATGCTCATTTTTTCTGACATCTTCAAG
 GCCCTGAATAGACGTCCTAATTTCCAGGTCTGTGTAGACTGACTTGGGTTACTCAGGTAATGGCCTCTCTTCTGTGAT
 GAACACACGTATTGAAGCATATATATGCCAGGCTCAGTACTAGACACAAGGGGTACAGTCAATGAACAAAATACACACA
 ATATTCTACCTCATAGAGCTTACATTTTAAAGGGGAAGCATACAAAAATAAATTAGCTAAAAATATAAATATCAAG
 TGGTAATAGTACCACACAGAAGAATAAAGCAGAGTAAGGGTTTAGATGGTGAAGATAGGAGAGCTGCTCTTTTACATGA
 GGTAAACAGGAAAGGCATTTCCAAGTACTTCTCCCTGCTTCTTCTCATCTGTGTGCTCTAGTTTTACTCTCCCTCCCT
 TGTGTTGATCCCTATTATTACTTGCAGTGTAAATCCCTAATGCAGAACATGGTTAGCATTGTTGTTAATGGCTTTCCCG
 TAATAATTGCATTAAATGATTTCCTCCACTATGAATTATCTGACATGTGAGAACAGACGAATGCTATCTAAAGGCTT
 TTTAAATCTGTTAAATTTATAGGGCATATCCAGCCCTCACCAGGGTCACTTCACTCCATTCTCAGATAGTGCCAC
 TGTCTGCTGCTTCTGCTGTCAATCAAAAAGAGATGGCTTCTTAATGAGGCTGGTTTTATGACTTTTTTCTTCTTAAGAC
 AAAGTCAGTCTTCTTTTGCAAAAGTTGTTCTAATGAAGGAAAGTAGAAATAAAATTCATCATAGCTTCTATGGCCAGA
 CATAAAATGTCTACAGCAGGATTGATATGGAAACATAAGCTTTTATTAATTTGTTTATCTGGATGCTTCTGAAGCTAGA
 AAGAAAGACTTTCAACATGGAAGCACTGGCAACTGAATTTCCATAATGGATTCAAAGATCTAAAGAATATCCTCAATTT
 ACATATTCTTCTGAATTTATGTTCAAAGAAAGGGTATTAATATAAACATAAAGTAAATAAGACAAAGCCCAAGTGTA
 TTAAGACTATTCAAGGCCTGCCATGCAATTCAGTGGAAAGTCTACCAGTAGGTTATTGGGAAACAGAGAGAACTT
 GGAGTCCAAAGATAGGAGAGGATACCCACCCTAACCTTCAATGAAACCACAAGCTGGCCACTTAGCTTTTCTTGTGCT
 GTAGAGTCAAATGTGAAACAATAGGCTTTATTTATTTAATCTTTGTATAAGGCCTTTGCTCAGTACATTATATATTG
 TCTCATCTCATAGTGAGCCTGAAGGGTAGTAATTTCAATGTACCTTACAGATGAATAAACTTAGACTTAGAGACCGGT
 CAAATAGCCTGCCCAAAACAACCAGTTAATAAATGGAATTGGGATTTAAACTTAGATTTGTCTGATTCCAAAGCTTGTG
 CCCAACCAGTGTATTATTGAGTACCTTCCAAAGAGCCAAGCAACAGTTTGAATAGGTTCCATATGTTCAACTATCACA
 ACAACCAGATAGAGTAGATATTTCTGTTGAAGATGAGGAAATGATGTGGGGGAGAAAAAGTGATTGTGTGGGGGAGAAAA
 AGTGATTGTGTTGAGGTACACATCTAGAGTGGTCGAGTCAGAATATGTGTGAACCTCAAGACCTCTAGCTCCAAACCTA
 TGAATTTTGTGTTTTAAACATGACTATAGTCTATTCTCTGTACAATGTTTCATAATATTTTTCTGCCAGTTGCCGTGCTC
 CCTTTAGGTAAAGGGATAATTAGCAGAGATTCTTTCAGAAAAGTGTCAAATATCAGCACTTAAAAACAGTGTGTAATT
 TTCCCGTTATTTAGCCCATTAATTCAATTGAGCCTAATTTCAATGCTTCTAAAAACAGCATAAGTTCTGTGGGTAGTGTTC
 AGTATGCTTCAAGTGAACGAATGCATCTAGTGGCCTGAGAAGACTCCTACTGCTTCTAAACATGTATGAATAATGGTT
 GCCACCTGCAAGTAGCTTAGGCAGTGGGCAATCATACTTCAATTTCTAAAGGGTGTGGAAGGGATGAGTATTTTCTGTTT
 GAAGCTCAAGCTAGATTAAATGAATTCCTGATCTTAATCTACTTTGAACCTACTTGGAACACATCATGAGTTGTTTTG
 GCTTACTATTAATTTTTTAAATACAAATACAGTGTCTTGTATGAAAGCATAGGATTTTGTGTAGAGAGAAATTTGAAT
 GTCTTGAAAAATTCAAAGGAGAGCTCAGGGAAATAAATGAAAGCTGGTGGATTTCTAAAAATCTTTATGAGGATTAA
 TATTAGAACTTGCTGTACAGTCTAACTGATTTTTGACTTTGTTTCTGGGCTATTGGTTTCATATAAGACACTATTAGT
 AATTTCAAGAACAAATAATATGGCCACATTTCTGTTCTAATAAATGGTACTACTTGGGATCAATGGATGATTGTTGT
 CATTCCCCAAAGATTTTTTAAACAGCAGAACCCAGAAAACTAATTCACAAATATCAATATTCAGCACTTTGATAAATTC
 AGATGAATTTGCCTACCTAAAGAAATGCTACCTGAAAGCTTCTCTGGCAGGCTTCTCCAGAGTTTCATTATCTACTCT

47/375

GAACFTTTGTTTACATAGCAATCATTTCTGCTGTGTTCTTTTCCCTACTAGCCTTGGTAGGCTTCTTAGCTGAATTGT
 CCTGAAACCTATAAACCAGCCCTGGAGGCTCTGAAAAATTAAAGATCTGTCTTTTTTGTCTGTTTAAATAATGTTAGC
 TTAAGAAAGTCTGCAATGGAAGAACACTCAACTTGTCTTAAATGATTCTCTCATTATTCAAGTTGCAAAATAGAAAGAG
 GTATTTCCCAATTTGCAATAAAATATTGGACTTTAATTTCTAAAAAAAATCTTGAAAGCTACATACTCCATAGACTTC
 TAAGCAAAGAGAGTCAAGAGACATTCATCTTCTTGAATCTTCATTAATCTTCACGTCCTAAATAATTCTCTCATTATT
 CAAGTTGCAAAATAGAAAGAGGTATTCCCAATTAGAAATAAAATATTGGGCTTCAGTTTCAAAAAAAAATCTTGAAAGC
 TACATGCTCCATAGACTTCTAAGCAAAGAGAGTCAAGAGACAATCATCTTCATAACTAACACCAATTGTCATAAAGCTT
 CCAAATGTAAACCTAAACFTTTTTGTTAGGAGTAAAAATAAAAAAGCCAAACAAATGAAAGCTGTGAACFTTCTAAAC
 ATCTTAAAGATTCTCTGGAAATTTAAACATTTAAGTTATATGTTAAGTTGTGTCTATCAAGCAGGTACTTTAGAAAAAG
 GGAAGATTTAAACAAATTTAAATATATGCTCTAGTTGTTTGAATTTAAATGCTTTTTGTGCCAAAGAAATTCAGGATAGA
 GATTTAGTAATCAGAGTTGAAAAATGCATAACACATTTGTTCTAGTAATTTCCCATCATTCAAAGGAACCATCTGTACTG
 AATATCTTAGATAGTTTTTCAAGTTCGGTTTTACATTGCAGACATAAAGGAATCTTTTGTATCTCTTAGACAACAA
 TTCTGTTATAGAAGTTTACAGGCTAATGGCAAACACATCTCATAATTGTCCTTCCAGTTTCTTGACCCATGTTTACTTC
 CCTTAAATTTATGCCATAAGTCAGTGTCTCTTGACAAAGTATACTCTGAACATATTTATAAATCATTATTTTTTCCAAG
 CAGTTAATCTCTAACTCCCTTTTTCTATTTCTGTATCTCCATCAGCATTCTTTTGCAGGGTTCAATACTCTTAATTTGA
 CATAAGACCCATCCCTGAGAGCAAGGGAGAGAGAGGAAAGCCCTGGCCTTTCTTTTTGTACCTTGATTTTTTCCATTC
 AAACCTCATCATTTGTTGGTGCATTGAAATCTGGAGGTTTGAAGTGAAGATGGAATCAGAGAGATTTAGGAATGGATTGAG
 ATTCTACAACCTAAAAACCATTAGGATGCCTATGAGCTTTGTTTTCTGCATAATATCTGAATTACAAATTGTATTTAACA
 AGTAAAACTAAGTTGTGTCCGACTAATTGAAAACCACFTTGGTTAATGTTACCTCTTTTTGTGTCCATTTAAATCCATT
 AAATCTTTCTTACTTTTGCCTTTAAATTTAGAGTAATCTATACAATTCATGCTACTGACTCTGCCTTTTAAACACACA
 AATATTAAAAAAGAGACATGTTCTGGTGTCTTCCCTCAGCCAGTGAGATGTGTTACACAGTAGTCTTTGTTAT
 CAGCCTTTGGTTTCTGATAATTTAGAAAGCTTTCAATCCCATCATTATGAAAGTCTGTGAACAATAATTTTTATTTA
 AAGATTTCTTACAGTGCCGAATCTTACAACCATTTATAAATTCATGTCTGTTTCTTAAAGTTACAGAATCTTTTCA
 ATTTTAAAGCCTTAACCTCTTGTCTGCATAGCAAATCCTATTATTATTTTAAAGCTGAATTCAGTGTCTCTCTTA
 AATGAAGATTCTTGATCATGTCAATCAAAGAGAGCTTTCTCTCTGAAATCTTTTTTTTTTAAATATTAGTTTCAGGGG
 CACATGTTTAAAGTTTGCCTTAATAGATAAAATGGTGTGTTTTGGGGTTTGGGTGTACATATTATTCGTCCACCAGGTAA
 TGAGCATAGTACCCAATATGTAGTCTTCTGATCATCACCTTCTCTACCCTCCACCCTCAAATAGGCCCCGCTGTCTG
 TCCTTCTCTTCTGTTGTGTTCCATGTAACCTCAATGTTTAGCTCCCAATTATAAATGAGAACATGCAGTATTGTTGTTTCTG
 TTCCTGTGTTAGTTCTCTTAGGATAATGGCCTCCAGCCGCATACATGTTGCTGCAAAGGACATGATCTCATTCTTTTTT
 ATGGTTGCATAGTATTCATAATGTATATGTACCACATTTCTTTATTCAGTCTAATGTTGTTGACCATTTTGGTTGAT
 ACCTTGTCTTTGTTATTGTGAATAGAGCTGCAATGAACATATGCATGTGTGTATCATTATGGTAGAATGATTTATATTC
 CTTTGGGTACATACCCAATAATAGGACTGCTGGGTCAAATGGTGGTTCTGTTTTAAGTTCTTCGAGAAATTGCCAACT
 GCTTTCCACAGTGCGCTGGACTAATTTACATTTCCACTAGCAGTGATATAAATATTCCTTTTCTTGCAGTATCACCAC
 AACTGTTACTTTTTGACTTCTTAATAATAGCCATTCTGACTGGTGTGAGATGATATCTCATTGTGGTTTTGATTTGCAT
 TTCCCTAATGATTAGTGATGATGAGTATTTTTTCATATGCTTGTGGCCGTGTAAATGTCTTAATTTTGAAAGTGTCTT
 TGCCCACTTTTTAATGGGCTTGTGTTGTTTTTGTCTTGTCAATTTGTCTAAGTTCTTATAGATTCTGGATATTAAACC
 TTTGCCAGATGCACAATTTGTAAATATTTCTCCCATCTCTGAGGTTGTCTATTTACTTTGTTGATAGTTTCTTTTGTCT
 GTGCAGAAGCTCTTTAGTTTAAATTAGGTCCCACTTGTCAATTTTGTGTTTTGTTGCAATTGCTTTTGGCATATTCTATCA
 TAAATCTTTGCCAGGGCCTATGTTTAGAATGGTATTTCTTAGGTTTTCTTCAATGGTTTTTATAATTTTACATTTTAC
 ATTTAAGTGTCTAATCCATCTTGAGTTGATTTTGTATATGATCTAAGGAAGCTGTCCAGTTTCAGTCTTTGGCATATG
 ATTAGCCAGTGTATCCAGAACCATTTATCGAATAGGGAGTCTTTCCCATTTGTTGTTTTGTCAACTTTGTTGAAGA
 TCAGATGGTTGTAAGTGTGTGGGTTTATATCTGGGCTCCCTATTTCTGTTCCAGTGGTCTATGTATCTATTTTGTACCT
 ATACCATGCTGTCTTGGTTACTGTAGCATTTGAAGTATAGTTGAAGTGAATGATGATGATCTCTCCAGCTTTATCTTT
 TTTGCTTAGAATTGCTTTGGCCATTTGGGCTCTTTTTGGGTTGTCATATGAATTTTGAATAGTTTCTTAGTTCTGTAT
 AAGAATATCATTGTTTCAATTTGACAGGAATAGCATTTGCATATGTAAATTGATAAATTCCTGAAAACATTTCAACCTCTCGA
 GACTGAACCAGGAAGAAATTTAAACCTGATCAGACCAATAGCAAGTTCCAAAATTTGAATCAGTAATAAAAAAGGCTACC
 AGCCAGAAAAAGCCTTGGACCACACAGATTACAGCAAAATTTANAGACATATAAAGTAGAGCTGGTACCATTCTCTA
 CTGAAACTATTCCAAAAAATTGAGGAGGAGGAACTCTTCCCTAACTCATTCTATGAGGCCAGCATCATCTGGCAAAGA
 CAAAGCAAAGACATAACAACAACGTAAAAACTTCAGACCAATATCCTTGATGAACATAGATGCAAAAATCTTTAACAAA
 ATACTAGCAAATGAATCCAGCAGCACATAAAAAAACTAATCCCTCTCCCTCTCCCTCTCCCTCTCCCTCTCTCTCT
 CCCCACGGTCTCCGTCTCCCTCTCTTTCCACGGTCTCCCTCTGATGCCGAGCTGAAGCTGGACTGTACTGTGCCACCT
 CGGCTCACTGCAACCTCCCTGCTGATTCTCTGCTCAGCCTGCGAGTGCCTGCGATTGCAAGCCTGCGCCGCCACAC
 CTGACAGGTTTTCTGATTTTTTTTTGGTGGAGACGGGGTTTCGCTGTGTTGGCCGGGCTGGTCTCCAGCTCCTAACNGCGA
 GTGATCTGCCAGCCTCGGCCTCCCGAGGTGCTGGGATTGTCAGATGGAGTCTGGTTCACTCAGTGCTCAGTGGTGCCCA
 GGCTGGAGTGCAGCGGTGTGATCTCGGCTCGCTACAACCTCCACCTCCAGCCGCTGCTTGGCCTCCCAAAGTGTGCG
 AGATTGCAGCCTCTGCCCGGCTGCCACCCGCTGCGGAAGTGAGGAGCGTCTCTGCTGGCCGCGCCATCGTCTGGGACG
 TGAGGAGCCCCCTCTGCTGGCTGCCACTCTGGAAGTGAGGAGCGTCTCTGCCCGGCCNCCATCCCATCTAGGAAGTG
 AGGAGCGCCTCTTCCCGACCTCCATCCCATCTAGGAAGTGAGGAGCGTCTCTGCCCGGCCGCGCCATCGTCTGAGATGTG
 GGGAGAGCCTCTGCCCGGCCGCGCCGCTCTGGGATGTGAGGAGCGCCTCTACCCGGCCGCGAACCCTGCTGGGAGGTGAG
 GAGCGTCTCTGCCCGGCCGCGCCCATCTGAGAAGTGAGGAGACCTCTGCTGGCAACCGCCCGCTCTGAGAAGTGAGGA

48/375

GCCCCTCGCCCCGGCAGCTGCCCCGTCTGAGAAGTGAGGAGCCCCCTCCGCTGGCAGCCACCCCGTCTGGGAAGTGAGG
AGCGTCTCCGCCCAGCAGCCACCCTGTCTGGGAGGGAGGTGGGGGGGTGAGCCCCCGCCGCCCAGCCACCCCATCCG
GGAGGGAGGGGGCGCCTCTGCCCCGGCCGCCCTACTGGGAAGTGAGGAGCCCCCTCTGCCCCGGCCACCACCCCATCTGGGA
GGTGTACCCAACAGCTCATTGAGAACGGGCCATGATGACAATGGCGGTTTTGTGGAATAGAAAGGGGGGAAAGGTGGGG
AAAAGATTGAGAAATCGGATGGTTGCTGTGTCTGTGTAGAAAGAGGTAGACATGGGAGACTTTTTCATTTTGTCTGTAC
TAAGAAAAATCTTCTGCTTGGGATCCTGTTGATCTGTGACCTTACCCCCAACCCCTGTGCTCTCTGAAACATGTGCTG
TGTCCACTCAGGGTTAAATGGATTAAGGGCGGTGCAAGATGTGCTTTGTTAAACAGATGCTTGAAGGCGGCATGCTCGT
TAAGAGTCATCACCCTCCCTAATCTCAAGTACCCAGGGACGCAAACTGTGGAAGGCCGAGGGACCTCTGCCTAGG
AAAACCAGAGACCTTTGTTCACTTGTGTTATCTGCTGACCTTCCCTCCATTATTGTCTATGACCCTGCCAAATCCCCCT
CTGCGAGAAAACCCCAAGATGATCAATAAAAAAAAAAAAAACAAACAAACAAAAACAAACAAAAAGAAAG
GTTTGAGCTAAGAACTTGACGAGACAAAGAAATTAGTCAAGCAGAAGGATATCTGGGGGAATGGCATGCGAGGCAGAA
GGGAAAGCTAGGGTCGAGGCCCTCAGGGAAAGAGCAAGGCCAAGGGCTGGAGTAGAGGGAGGAAGAGGGGAAGTAGT
GGAAGATGAGACTAGCTTTACTACTGATTATGATGTAAGAATAGTGGCCAGTTTCCCTTTCCAACTTGGGCCCCGGCAGAA
TGGCTCCTGCAAAGAAGGGTGATGAGAAGAAGAGGGTCATTGCCCATCAACGAGATGGTGACCCGAGAATATCCCATC
AACATTGATAAGTGCAATTCATGGAGTGGGCTTCAAGAAGCGTGCCCCCTCAGGCCTCAAGAGCTCCGGAACTTGCCCC
TGAAGGAGATGGGAACCTCAGATGCACACTTTGATACCAGGCTCAACAAAGCTGTCTGGGCCAAAGGAATAAGCAACGT
CTCATACTGTATCCATGTTTCGGTTGTCCAGAAAATGTAATGAAGATAAAGATTTACCAAAACAGCTCTATACCTTTGGTT
GCCTACGTACCTGTTTACCCTTTAAAAAAATCTACAGTCGGTGTGAATGTGAACCTAAGCTCTATACCTTTGGTT
AATAAGTTATAAAATTTGTTTAAAAAAACAAAAAACTAATCCACCACCATTTAGCAGGCTTTATCCCT
AGGATGCAAGACTGATTTCAACATATGCAAAATCAATAAATGTGATTACCCATGAACGGAATAAAAAACAAAAACACA
TGATCATCTCAATAGATGCAGAAAAGGCTTTTGATATAAATTCAGCAACCTTCATGTTAAAAACCTTCAAAAACTAGGC
ATTGAAGGACATACCTCAAAATAGTAAGCCATCCACAACAAACCCACAGCCAACATCACACTGAATGGGCAAAAGCTG
GGAGTATTCCTCTTGAGAACTGGAACAAGACAAGGATGCCACTCTCACTGCTCTATTTAACATAGTATTGGAAGTCC
TAGCCAGAGCAATAAGGGAAGAGAAAGAAATAAGAGGCATCCAAATAGGAAGAGAGAAATCAAACCTACCTCTGTCAA
CTACCTAGAAAACCCCATAGTTTTGCCCCAAAGCTCCTAGATAAATTGAGCAAAAGTTTCTGGATACAAAACTAGTAGC
ATTTCTCTACACCGATAATGTCCAAGCTGAGTGCCAAATCAAGAGCATAATCCTATTACAAATAGCCACAAAAATAAC
ATATCTAGAAATATAGCTAACAGTGAAAGAGCTCTCCAATGAGAATTACAAAACCTGCTGAAAGAAATCAGA
GATGACATAAAACAAATGGAAAAACATTCCATGCTCATGGATAGGAAGAATCTCCTCTGAAATCTTATAGCTAGAGAAAC
CATAACATTTATCATACAAATTTGGCATTTTTTGAGGGTGAATGAATGGGAGAACTATTAGTAGTCACATTGGGACAAT
AATCATAACTGGAACCTATCCTGTGTAACTGGATGTATTGTCAACCAAGTTATTGCTTTTGGGATCCTAAGTGTAG
TATCAAGGACTTTGGACCGAAGTCTGTCTGGTTCCAAATCTGGTTCTCAGCATGACTTTGAGTAGATTATTATATCCT
TTGCCATTCACTTATTCTTTTATAGCTTCTTACTAAGCTTGATTAGATGTGTGCAAATTGTAAGGCATTGGTAACAC
AATGGTAAATAATTTATGGTTTGTGCTGTGATGAAGCTTACATCCAACCTTTATCTACAAAGTGGGGCCAAGGATACC
TACATTATGAAAATCTTTATATCATCGTGAGAAGTAAATACTATTTGTGAAGCATTTAGTAGGATTTTCAGTATATAG
GAAGTCCCTCAGTGATAACTATAATTTTATTTGTATTTTTCATATGCCATTTTGTGTCATAGTCGCATGTATAATTGTAA
GGTTTTTGAGAGTAGGAGGCAAGGCTTATGAACATTTACATACCTTCAGGCATCAGTATAGTACCTCTCATTGCATGA
ATGAATTTATTGAGTGAAATTCCTAAACACAGGTATCAAACTTTTTTTTTTCTCATTATCTCTTCTGTTTTTGT
CCTCTGTTGTTTTCTTCTGCTCTTTTTCAGAGCATTTGAAATTTTTTAGTGTGCCATTTTATTTTTCTATTGGCTTT
TAGTTATACCCCTTATCTCTCTGTTTATCATTTATCTTCTTTTAAATTTAATTTCTTGATTGCTCAAGGGCTAAAA
ATATGCAGCCCTATGCATTAGAATCTATTCACTACTCAGTATTGTACCTCTCCACATTTCACTTAACATTTGACAAA
TGATAGTAACTTACAACATTTTATTTCAATTTAGTCATCCTCTTCTTTTATTTTCTTTTATTTTGTAGACAGGGT
CTTGCTCTCAGCCAGGCTGGAGTGCAATGGCACAATCATGGCTTACTGTAGCCTCAAACCTGCGGGCTCAAGCAGTCTCT
CCTGCCTCGGCCTCCTGAGTAGCTGGGACTCAGTCATGTGCCACCACACCTAGTTAATTTTTTATTTTATTTTAGTA
GACATGAAGTCTCACTATATTGCCCAGGCTGGTCTCAAACCTCTGGGCTCAAATGATCCTCCCTGCTGCTCCCTCCAAA
GTGCTGGGATCACAGGCATGAGCCACAACACCTGGCCTCATCTCCCTTTCTTTGTATGGTTATTGTATATTCAATTAT
TTAACATGTATACCCCAACCTTAGAGTGTTTTCACTTTTGCCTTAAATAGTAGTCTTTAAGGAAATTTCTAAGAAAGA
AAACATACTACTTTATATTTAGTAATTTACTTAACATTTCCAGTGCTCTTTTCTTTCTTACTGTAGATCTGAATTTCC
ATCTGGTATCAGTTATCTTCACTTTTTGTATTTCTTATAGTGTAGGTCTGCTGGTGATTAAATTTCTCAGCTTTTATT
TATCTGAAAGTGCTTTTATTTTCTTCCATTTTTGAAGAATTTTTGTTGGTTGTAGAGTTCTGAGTTAACAGCTTTG
TTTTCGTTTTTCTTTTTCAGCGATTTAAAAATTCATGCCATTGGGGTTTTTCACTCCCCACTGTTTCTCATAAGCCCATG
ATCATTTCTATCCTTGTTCAACTGTACGTAATGTGTGTCTTTCTCTGGATGCCCTTAATATTTCTCTTTATCTTGGA
TGTGCTGCAGTTTTTATACAATGTGCTGGGTGTGGTTTTCTTTATATTTATCTTCTTGGGGTTTGCTAAACTTCTTG
GATCTGTTTGTATCGTTTTGAAAAGTTTTTCACTGTTATTCCTTCAAATATTTTTTCTGGCCCATCTCACTCGCTTTT
CTTCTAGGATTCCAATTTACATTTACGTTAAGACTATTTGGTATTGTCTTACCTATTCCTGAATCTTAGTTTCATCTTCC
TGATTATTTTCCCACTCTTCTTTCTAAGATTAAATAATTTCTACTGATCTGTTTTAGGTTCTCTTTCTTCTGCCAT
CTCTAATCAGCTATTCAGACCTGTCCACTAAATGTTTCATTTTTATTTTTTTTAGTTCTAGAAATTTTCAATTTGGTTAT
TTTCTCTGCCCTAGACTCCTCTATTCACTCTTGGATCATTTTTCTCTGTCATTTCTTGGACATATATTTTAAATTTCT
TTAACATATTTACAAAAGCTGCTTTAGATTCTTTGTTTGGACATATCTGGGTAATTTTGAAGATTGTTTGTATTTACTG
CTTTTTTGTCTGCTTATGATCATATTTTCAATTTTTTAAATTTATGCTTTTAAAGTTCTAGGGTACATGCGCACAGCGTGC
AGGTTTTGTTACATATGTATACATGTGCCATGTTGGTTTGTCTCACCCATCAACTCATCATTTACATTAGGTATCTCTCC

Fig. 6.53

49/375

TAATGCTATCCATCCCCACCCCCACACCCCCAACAGGCCCTGGTGTGTGATGTTCCGCCACCCCTGTGTCCAAGTGT
TCTCATTGTTCAATTTCCACCTATGAGTGAGAACATGTGGTATTTGGTTTTCTGTCAATTGTGATAGTTTGTCTGAGAATG
ATGGTTTCCAGCTTCATCCATGTCCCTGAAAAGGACATGAACATCCTTTTTTCATGGCTACATAGTATTCATGGTAT
ATATGTGCCACATTTTCTTAATCCAGCCTATCAATGATGGACATTTGGGTGGTTCCAAGTCTTTGCTATTGTGAATAG
TGCCGCAATAGACATACGTGTGCATGCTTTATAGTAGAATGATTTATAATCCTTTGGGTATATACCCAGTAATGGGAT
GGCTGGGTCAAATGGTATTTCTAGTTCAGATCCTTGAGGAAACGCCACACTGTCTTCCACAATGGTTGAACATAATTTA
CACTCCACCAAGTGTAAGGACATTCCTATTTCTCCACATCCTCTCCAGCATCTGTTGTTTCCCTGACTTTTTAATAATT
GCCATTCTAAGTGGTGTGAGATGATATCTCATTGTGGTTTTGATTTGCAATTTCTCTGATGACCAGTGTGATGAGCATT
TTTTCATGTGTCTGTTGGCTGCATAAATGTCTTCTTTTGAGAAGTGTCTGTTTCATATCCTTCGCCCACTTTTTGATGGG
GTTGTTTGTTTTTTCTTGTAACCTTGTTTAAAGTTCTTTGTAGATTCTGGATACTAGCATTATCAGATGGGTAGATT
GCAAAAATTTTCTCCCATTTCTGTAGGTTGCCTGTTCACTCTGATGGTAGTTTCTTTTGCCATGCCGAAGCTCTTTAGTT
TGATTAGATACTATTTGTCTATGTTGGCTTTTGTGGCATTGCTTTTTGGTGTTTTAGTCATGAAGTCCCTTGCCCATGC
CTGTGCTCTGAATGGTATTGCCTAGGTTTTCTTCTAGGGTTTTTATGGTTTTATGTCTAACATTTAAGTCTTTAATCCA
TCTTGAATTAATTTTTGTATAAGGTGTAAGGAAGGGATCCAGTTTCAGCTTTCTACATATGGCTAGCCAGTTTTCCAG
CACCATTTATTAAATAGGGAATCCTTTCCCATTTCTTGTTTTTGTGTCAGGTTTGTCAAAGACCAGATGGTTGTAGATGT
GTGGTGTATTTCTGAGGCCTCTGTTCTATTTCTTGGTCTATATCTCTGTTTTGGTACCAGTACCATGCTGTTTTGGTT
ACTGTAGCCTTGTAGTATAGTTTGAAGTCAGGTAGCGTGATGCTTCCAGCTTTCTTCTGTTGGCTTAGGATTGTCTTGG
CAACGTGGGCTCTTTTTTGGTTCCATATGAACTTTAAAGTAGTTTTTCCATTTCTGTGAAGAAAGTCATCGGTGGCTT
GATGGGGATGGCATTGAATCTATAAATTACCTTGGGCAGTGTGGCCGTTTTTCAATATTGATTCTTCCCATCCATAAG
CATGGAACGTTCTTCCATTTGTTTGTGTCTCTTTTTATTTTCGTTGAGCAATGGTTTGTAGTTCTTCTGAAGAGGTCTT
TCACATCCCTTGTAAAGTTGGATTCTAGGTATTTATTCTCTTTGTAGCAATTGTGAATGAGAGTTCATCATGATTTG
GCTCTCTATTTGTCTGTTATTTGTATATCAGAATGCTTGTGATTTTTGCACATTGATTTTGTATCCTGAGACTTCGCTG
AAGTTGCTTATCAGCTTAAGGAGATTTTGGGCTGAGATGATGGGGTTTTCTAAATATACAATCATGTCTGCAAAACA
GGGACAGTTTGACTTCTCTTTTGCTAATTGAATCCCTTTATTTCTTTCTCTTGCCTGATTGCCCCAGCCAGAACTTC
CAACACTAAGTTGCATAGGAGTGGTGAGAGAGGGCATCTTGTCTTGCTGGTTTTCAAAGGGAATGCTTCTAGTTTT
TGCCCATTCAGTATGATATTGGCTGTGGGTTTTGTCAAATAATGCTTCTACTATTTGGAGATACATTCCATCATTATGTA
GTTTTATTGAGAGTTTTTAGCATGAAGGGCTATCGAATTTTGTGAAGGCCTTTTCTGCATCTATTGAGATAATCATGTG
GTTTTTGTCTATTGGTCTGTTGACGTGATGGATTATGTTTTATTGATTTGAGCATGTTGAACAGCCCTTGCACTCCCTGGG
ATGAAGCTGACTTGATTGTGGCAGATAAACTTTTTGATGTGCTGCTGGTTTTGAGTTTGCAGTATTTTATTGAGGATTT
TCTCATCGATGTTTCATCAGGGATAATGGTCTAAAATCTCTTTTTTGTGTGTCTCTGCCAGGCTTTGGTATCAGAAT
GATGCTCATAAAATGAGTTAGGGAGGATTCCCTCTTTTTCTTTTGATTGGAATAGTTTCAGAAGGAATGTTACCAGCTC
CTCTTTGTACCTCTGGTAGAATTCAGCTGTGAATCCATCGGGTCTGGACTTTTTTGGTTGATAGGCTATTAATTATT
GCCTCAATTTTCAGAGCCTGTTATTGATCTATTTCAGGAATTCAACTTCTTCTGGTTTTATTCTTGGGAGGGTGTATGTGT
CCAGGAATTTATCCATTTCTTCTAGATTTTCTAGTTTATTTGTGTAGAGGTGTTTATAGTATTTCTCTGATGGTAGTTTG
TATTTCTGTGGATCAGTGGTGATATCACCTTTATCAATTTTTATTGTCATCTATTTGATTCTTCTCTCTTTTTTATTAGT
CTTGCTAGCAGTCTATTTTTTTGATCTTTTCAAAAACCAACTTCTGGATTCAATTGATTTTTTTGAAGGGTTTTTTGTGT
GTCTCTATCTCCTTCAGTTCTCTCTGATCTTAGTTATTTCTTGTCTTCTGCTAGCTTTTGAATTTGTTTGTCTTGTCT
TCTCTAGTCTTTTTAATTGTGATGTTAGGGTGTGATTTTATAGTCTTTCTCTGCTTTCTCTTGTGTGCATTTAGTGCTAT
AAATTTCCCTCTACACAGTGCTTTAAATGTGTCCAGAGATTTCTGGTATGTTGTGTCTTTGTTCTCGTTGGTTTCAAAG
AACATCTTTATTTCTGCTTCTCATTTATGTACCCAGTAGTCATTTCAGGAGTAGGTTGTTTCAGTTTCCATTTAGTTG
AGCAGTTTTGAGTGAGTTTCTTAATCCTGAGTCTTAATTTGATTGCATTGTGGTCTGAGAGACAGTTTTTTGTAATTTCT
TGTTCTTTTACATTTGTCTGAGTAGTGCTTTACTTCAATTAATGTGGTCAATTTTGAATAAGTGTGATGTGGTGTCTGAG
AAGAATGTATATTCTGTAGATTTGGGGTGGAGAGTTCTGTAGATGCTTATTAGGCCCGCTGTTGCGGAGCTGAGTTCA
AGTCTGGATTTCTTGTAACTTCTCTCTGTTGATCGGTCTAATATGACAATGGGGTGTAAAGTGTCCCATAT
TATTATGTGGGAATCTAAGTCTCTTTTTAGGTCTCTAAGGACTTGCTTTATGAATCTGGATGCTCCTGTATTGGGTACA
TATATATTTAGGTTAGTTAGATCTTCTGTTGAATTATCTCTTTACCATTATGTAATGCCCTTTCTTTGTCTCTTCTGAT
CTTTGTTGGCTTAAAGTCTGTTTTGTGACAGAGACCAGGATTGCAACCCCTGCTTCTTTTTGCTTTCCATTTGCTTGGTAG
ATCTTCTTACATCCCTTTATTTTGAACCTATATGTTTCTCTGCATGTGAGATGGGTCTCCTGAATACAGCACACTGATG
AGTCTTGACTCTTTATCCAATTTGCCAGTCTGTGTCTTTAATTGGAGCATTAGCCCATTTACATTTAAGGTTAATAT
TGTTATGTGTGAATTTGATCCTGTCAATTATGATGTTAGCTGGTTATTTTGGCCATTAGTTGATGCAGTTTCTTCATGGT
GTGATGGTCTTTACAATTTGGCATGTTTTTGCAGTGGCTGGTACCAGTTGTTCTTTCCATGTTTAGTGCTTCCCTCA
GGAGCTCTTTTAGGGCAGGCCTTGTGGTGACAAATCTCTCAGCATTGTGCTGTGTAAGGATTTTATTTCTCCTTC
ACTTACAAAGCTTAGTTTGGCTGGATATGAAATCTTGGGTTGAAAATTTTTTCTTTAAGAATGTGCAATATTGGCCCC
CACTCTTTTCTGTCTTATAAGGTTTCTGCCGAGAGAGCTGCTGTTTGTCTGATGGGCTTCCCTTGTGGACAACCCGAC
CTTTCTCTCTGGCTGCCCTTAACATTTTTTCTTTCATTTCAACCTTGGTGAATCTGAAAATTTATGTGTCTTGGGGTGC
TCTTCTTGAGGAGTATCTTTGTGATGTTCTCTGTATTTCTTGAATTTGAATGTTGGTCTGCCTTGCTAGTTTGGGGAAG
TTCTTGTGGATAATATCTCCAGAGTGTTCCTCAACTTGGTTCCATTTCTCCCGTCACTTTTCAGGTACATCAATCAGAC
GTAGATTTGGTCTTTTACATAGTCCCATATTTCTTGGAGGCTTTGTTTGTCTTTTACTCTTTTTTCTCTAACTT
GTCTTCTTGCTTTATTTCAATTTGATCTTCAGTCAGTGATATCCTTTCTTCGACTTGATCTAACAGGCTATTGAAG
CTTGTGCATGCATCACGAAGTTCTCGTGCCATGGTTTTTTCAGCTCCATCAGGTCAATTAAGTCTTCTCTACACTGTTTA

50/375

TTCTAATTTGCCATTTCGTCCAACATTTTTTAAAGATTTTCAGCTTCCTTCAATGGGTTAGAACATGCCCTTTAGCTTG
GAGAAGTTTGTATTACCATCCTTCTGAAGCCTACTTCTGTCAACTTGTCAAAGTCATTCTCCGTCCAGCTTTGTTC
TAGCTCGTGAGGAGCTGTGATCCTTTGGGAAGAGAAGAGGCACCTCTGGTTTTTTAGAAATTTTTAAATTTTCTGC
ACTGGTTTCTCTCCATCTTTTTGGTTTTATCAACCTTTGGTCTTTTCATGTTGGTGACCTACAGATGGGGTTTTGGTGTGGATGTCC
TTTTTGTGATGTTGATGCTATTCTTTCTGTTTGTAGTTTTCTCTCCTAACAGTCAGGTCCCTCAGCTGCAGGTCTGT
TGGATTTTGTCTGGAGGTCCACTCCAGATCCTATTTGCCTGGGTATCACCAGTGGAGGCTACAGAACAGCAAATATTGCT
GCCTGATCCTTCTCCATAAGCTTCGTGCTAGAGGGGCACCTGCCTGTGTGAGATGTCTGTCTCAGCCCCACTGGGAGGT
GTCTCCAGTTAAGCTATGTGGGGGTGAGGACCCACTTGAGGAGGCAGTCTGTCCGTTCTCAAAGCTCAAACGCCATG
CTGGGAGAACCCTGCTCTCTTCAGAGCTGTGAGACAGGGATGTTTAAGTCTGCAGAAGCTTCTGCTGCCTTTTTTTCA
GCTATGCCCTGCCACAGAGGTGGAGTCTATAGAGGCAGTAGGCTTTGCTGAGCTGTGGTGGGCTCTGCCAGTTCCAG
CTTCTGGCCACTTTGTTTACCTACTTAAGCCTCAGCAATGGTGAACACCCCTCCCCCACCAGGCTGCTGCCTCGCAG
GTCAATCTCAGATTGCTCTGCTAGCAATGAGCAAGTCTCCATGGGTGTGGGACCTGCTAAGCCAGGCACAGGAGAGAAT
CTCCTGGTCTGCTGGTTGCTAAGACAGTGGGAAAAGCGCAGTATTTGGGCGGAGTGTCTGTGTTGTCTATGGCTTCCCT
TTGCTAGAAAAGGGAAATCCCCCAACCCCTTGTACTTCCCAGGTGAGGCGATGCCCCACCCCTGCGCTGGCTCCCGCTCC
ATGGGCTGCACCCACTGTCCAATCAGTCCCAATGAGATGAACCAAGTACCTCAGTTGGAAATGCAGAAATCACCCTATCT
TCTGCATCGATGACGCTGGGAGGTGCAGACTGGAGTTGTTCTATTTGGCCATCTTGGAATGGAGATCTTATTTCTTTA
TCTGGTGATTTTTTATTGCATACTGGACATTTTGGACAATGTGTTATCATGCCTCTGGATTGTGTTATTTCTTCTGAA
GAATTTTGCTTGTATTCTTAGCATGCTGTTCAATTGGCTGATCACGTTGAACATGTTTAAGCATGGTTTTAGGCTTTGT
TAGTCCAAATCTTTGAGAAATCCAGGTGCTTTCCCAACCTATTCAACCTGGCAGTATTCAGTGTGATAGAGGATGTT
TTTCTGATGATAGGCTTTGTTTGTAGACTTTACTGGAGTCATAGGACTTACTTTAGGACATAGTCTTTACTTGTAGAGA
GGTACCAACTTTCTGTTTCTCAGGTAGATCCCAGGGGTGTCAAAGTAGTATTTATTTATGAGCTCTCTCAAACCCATAG
GACCTGAACCTGCAATGATGTCTAGTACTATTCTTCTCCAGCAATCTTGACCTCCACTATTTCTGTCTCTCAACCTG
ATAACATTTTCTCTCTGTTAAGCCTCCAGTATTTCTCACTCTGCAAAATGTATGGTGGTGATCTCAGTCACAGATTTGTCC
CATGTCTGGGACAAATCTCTGCAAAACTTCTGAGACTTCTCTGTGTTAAAGTCTTTACTCTCTAAGACTCTGCTTTATA
GATGCCAGCCATGCCAGCTGCCTCAGACTCCAGCTCTTTTTGTGATGTTTAGGAAAATATCCTTATTCACAGAGGTGGA
CATTCTGTTGGGAGAGGGATTTTCTGATTGGCTTGTAGCCACTGTTTGAAAACGGTTTTCTCATATATTTTACT
TAGTTTTGTAAGTATTTTCTGTGAGACAGATAATCTGTTACTAGTTACTCTATCATAGCTGGAAGCAGAAATATATAGG
TATCAATTTGATTTGCAATTGTTTCTAGTTTACAATGCATTCTGCCTATCTTAAAAAATTTGTAATCTAATCATTTTA
TTTTTGATCAGGGAATGTATTTATTGATTACATGAATAAAATTCAAAGGCTATAGAAGAATATGTAGCAAAAAATCTC
TCTTCTAATCTAGTAGCCTAATTCTTCTCCTCAGAGGTGATAGATATTACCAGTTCTTTTTGTTCCTTTTCAGACATAT
TTTAGATATATATGAAATCCTCTCCCTCTTCTTATTTTCTCACATAAATGATAGCATGATGTGCATACTTTATATTTT
TTTGTGTTTTGTCTTTTTTCTACTTAATGACATATCTTGGAGGCTATACATATTAATATATAAAGAATTTCTACATTCT
TTTTTGGGCTACATGATACTCAGTTTTATGAAATACCATGAATTATCTCACCAGATTCTTATTTTACTCATACTTTTT
GGTTATTATAAACAATGCTTCATGAACACTTTTGGGTAAACCATTGGGTATATGCCAGTATATCTGTAGGATACATTCA
TAAAAGTGCAATTGCTACCTGAAAATGTATGCACATTTGTTACTTAGTTAAATGTTGCCAAATTTCCCTCCAGCAGCTG
TGTTAGTGGCTGTAGCCTCGTTAAAAATGTATGGGAGGAATGCTGACATTTTGTGTTTACCTGCAGTATCCATTTTCTC
CATGGTACATCTACAAAATGGCTTCTATTTTTATTCTTATGTTTATCTTAATCTTTTAAATAATCTTTCCCTGATTAA
CTTACAAGTTTCTGTTTATAACAAATAAGGGGGCTAAGGGGGAGGGGATGGTTAATGAGGAAAAAATAGAAAGAATGA
ATAAGCCTACTATTTGATAGCAACAGGGGTGACTAGAGTTAGTAATCTTCTACAATTAATAAATACCCGAGAGTG
TAAGTGGATTGTTTGTAAACACAAAGTGATAAATGCTTGAGGGAATGGATACTCCATTCTCTATGATGTGATTATTCACA
TTGCATGTCTCTGTGTAACATCTCATGTACCCCATAAATATATTATACCTACTATGTACCCGAACAAATAAAAATAA
AAAAATTTAAAGTACAAAAAAGACAAAAAGAGTCACACAGAAAAATAAGGAAAAATAGTCTATAGAAGGATAAAAAACA
AAACAAAAAACAATAAGATAAGCAGCAGCGATTTATATAAATTAGAGTTATTATTATTACTGTGGTTGCTGTGGTTG
ATTTTCTAATATTTCCAGGGCAGCAATCAGCTGATAATATCCATTTTAAAGTGCAATTTTATTTCATTTTAGTCAGT
CTGATTTTCAAATTAATCTCCCCTTTTTGTGCTTTAAAAATAGGGGTATAACATATGCTAGCCTGTTCCCAATTTGAAC
TCGTGTCTTTCAAATGCACAGTCTAACTTTATTAATCTGTATGGAATCATGTCTGTGAGCTTTCTAGCTTTTCTTTC
TTTCTTGTTTTTTTTTTCTTTACCTCAGTCTGCTCTCTGAATTTGAGGAGCTAAAGATATTTGTGACAAGACTTAGCTAC
TCAATGAACATTCGGAATCAATGTTTTCTGTGGAACAGTGACTCTGATGGAATCTTCTCCACTTCTGGAACATTAA
ATTGTCACTAGGTAATTCAGGAGTCTCTTTTTTCTGAGTCTGCTGAGTATACTGAAAAGTGAATTTGTGACCTCATTG
TTATGAAATTTGGAAGTGTATCTTTAATGTTAGCTTAGAGTGTGTTTTTTTTTCTCTCTCTGCTGCTTCCCTTTAAAC
CCTGACCATTTAAACATTATAGACAAGGACATTTCTCATGTGTTTGTCTTTCTCTAAATCTGTTAGTACTTTAAACTGT
GTGGTCCCAACACGATGTTGTACTATACTTGTGGAATCAACACTCAAAGAGCCCATTCAGAAGAGTTTTTTTTTCTTCT
TCTTGGTAACTGCTTTCTAAAAAAATTTCTTTTATATTTCTAAAGCTCTAAGCCCCCAAGCCCCATCTCCCATGTTG
AGATTCCTGTTGCCACCTGCCCTTTGACTCTTCTATGTCTCTCTGTCAAATACCCCTTCTGCGCTATTGTTCCAACCTTAT
TATAAACACTGTAACTGAATGGCTTGAAAAGATGTTGCGAATGTAGTTGATTTTTCTCTGAGAAACAAGTGTGTTAG
CTTCTTTGGAGAATGTATTAAGTGGTACTACTGGCACTACTAAGCTCTAGGCTTAGAACTGTGTGAGGGAAACAAAAA
CAGAACAAGATATGCAGAAGTCTGGTTTTTGGCCCTCAGGAGTGAATGGTTGTGAGTGTAGGATCTGAACCTCAAGCA
GACAGATGTAGGCTGGATGATCTTGGGTGAGGTACATAACTCAGTTCTCTCATCCGTGATACAAATGTACTCATCT
CACAGATTAACAAGATAAATCTGTGGGGAGAAATCCGCCCCAGAAATGAGAGAGGCTGTTCTCTGGGCACACTTGCTTT
ATGTGGTCTTTTCAATTGCTGTCAATCAGTTTTTAAAAATCTGTTGCCCAACACCATTTGTGGCTATTACCATGACTAC

Fig. 6. (5)

[illegible]

Fig. 6.46

52/375

AAGTGAATGTGTAAATATGTCTATAAAACGATGCGATGTTGGGTAACGGCAACAAAATTATTGGTCTCAGTCTCCCTT
GGCTGTTTTTTCCCTTAATTTCTTTGTGTTTTAGTTGATCTACTTGCAAGATGGAATAGTGGAGATAACATTTTCTAG
TGTTCTTTTGAAGACACGTATAATTGTAGTCCTATTGTCTGAGACTGAATGTACAGATGAACCCAGCCATGAATGGAG
AAAACCTCAAGAAAAGTGAAAGAAAACAAAACAAGCCAACAGCTCCTTCACTGGGATAAAAACCTCAGCTAAAAGAG
ATAGTTACTCTAAGAATTGTACTGTTTTATTAAGTTAGTGACTTAAATATTAATCTTTTGAATATAATTTGGCATGG
GGAATCTTTGGGAAGATAAAGATTGTGGTCAATATAACACCTATCTAGCCACCTTTTTTGGGGTGGTTGGGTGAGTAG
CAGTGGAAACAACTAGTATGTAAATTGAGATTTCTAGGAAAGGTGGAAAATATCTGGGGAACACCATTGGATCATAGCT
TAGTTATTGTCAGCAATAAGAAAAATATATTTCTAACTTTAGGGTTAATTTCACTCACGTTTTCTTCATTTAGATCTGG
TTTTTAATCCCTGATTTAGAGCCGATCTTTTAAATTGTCAATTTTACTTTTTTAGAGCTAAATGGTTTTGAATTGGACTTA
AATATTCGGAAATAATGTTAAATGTGAAATTCGTTGCTTTTAGTATAAAATAAATGTATGCATTGAAAAATCTTTTT
ACATGGTGATTACTTTTCATATATTGTGATGCCTTGGTTTTATATAATAATTGCAATGATGATGATGATAATGAGAT
TAGCTAACACTTATGTGATCTTCCCTTTGTGACATGTCTGAATTTCTTCTGGTTATGTCATACAGTGGTGGTAATAAT
ACACGTGAAAGGCCAGGATAGTTCTAGCCCTTACATAAGTTTGCTTTTACTTAAGCTAGTCTTTTAGTCCGTTTTTCC
TTTAAACATCATAACCTATTTTGGTTATAGCTACCAGTTGTAACATTTTTTACATAGATTTTTTACAGTTAATGGAAAAT
GAACCTTCTGGAAGTTATCCTTTTATCAGCAATGAAGATTATACCAGTGCATGCTTTATTACAACCTAGAATGAGTG
TGACTTGAAAAAATTAGAACTTACCAAGTTGCTTGACTCCCTCTTTGTCCAGTGCAGCAGTTAATATCTCATCTCCCAT
TCTCTAGGGCCAGTCAGCCTATGTTCAAATGTCAGTTCTTCCATGTATTAGCTGCAAACTGACCTGGGGAAAAGTATG
CAGCTTTTTTAGTTCACTATTCTCATACGTAAAAATGGGGTAATGGTACCTACTTTCATATGATTATTGAGAAGTTTAAAT
GAATTCCTGTTAGAAGCAGTAAGAACAGTGTCTCTCCCATGGCAAGTGCTTATGTTTTTAAATATAAATGTCTCT
GAGGCTCATTGCCATCATATTATCACAGAGCCTGTATCAAGGACATGGAGGCAATACCTGTCAGTGGCCAAGCATGAAAA
TCTTTGACAGTTCTGTTACTTGACAGCTGTAAGAGCTTTGGAAGTTGCTTAACCTTAGACTAGCTCTCCTCATTTGTAA
AATGGAAGTCAGTCATAGTGTCTGCTTTGTGTGGTTGTCTGAGGATTAAATGAGATGATATTTGTCAAGACTTGTGGTGA
GTCACAAAGTTCACTGACATCTCATCCAGATGGGCGGAGAAGAGGTAGCTTCTAGTTTGTGATTAACTAATGTGATC
TTCCTCCTGAGCAAACCACTGCTGATTAGAAGGAAAAATAAATTAATGTCTAAGCTGTCTTAGTCTGATGTATTGATT
TTAGATAATGCTCTGTCTCTAGGAAAAGGTGCTCAGACTTTTCAGATCTCTGTGTTCCAGGATTTCCAGGTTTCTCTCC
AAGATGATGTCTGGTATGTAGGGGAGGGGAGGGGCTTAGGCAGCCTCTTGGTGGGAGAGAAAAGTCTGGACCCATAGGC
ATAGTCATGGTGTCCACTGATCGCACTTCAGGAACAGAGACCAATGCCTCTGGATGGACTCTCCACACCCAGCCTTTGC
TAGGGTGCCATCACATTATTTGCCAGGCTTGTGTTCTAGCTCTCAGCTAGTCACTTTCTAATTTCCCCCTTAAACCTT
GGACTCCCAGCCCTACCTCAAAGGTTGCCATAGGGAACAAAGAGCTGCTCAGAAAAGCTAAACATCGAGGCCCTCCCTCT
GCCTAACTCCCTCCAAATGTCTTGGTATGGGGCAGCCTGAGAGGGCATATCTTTCTAGAGCCCTGAACAGGAATGGGG
CAGAAATCCTTCATCCCTCGGGCTCTCCTCTATCCACACAAGAGTCTTTAAGGCACACACATCTGACTGCTTTGTTCCCT
TCCCTGCTTTTCTCTCACACTCCTGGGATGAGAAAGAGAGATGACAGTTTCTCTACACTCTCTAGGCCAAATCTT
CATTTACCATGGAAGAATCTTTTGAGCCAAATCATTTGGATATGTGAAAAGCAATACAGACATTTAAACATTCTTCCCT
CAAGACAATATGTCAGTAAGACTTGGCAAATGGCCTGTTTTGAATGCCAGATGCTGAATATTAATCTCTTCTCTTTA
TCTGTCTTAAGAATGTTTTATAAATTTGAAAAGCAAGGAAGAGCACAGTGATGTTTTCCAAAATATTAATCCAAAGTAA
GCGCATAATCAATACAAGCTTTATAATGATGATGATGATGATGATGATAAAGTAACCATTAGCACAGGATAATTGCTAT
ATAGATTGTTTTTACCCTTGGATAGCTTCTGGTTTTAGGGAAGAGACCATAACTTCAGAGCACTTGTGCACTTGGCATC
ATGACACGTAATTGCTCCGCCCTCTCACAATCTCACCCCTCTGCCCCCTCCCCATCTCTCTGGCCACACAAGACTTTT
TGCTCCTGGAACATGAAATGATTTTTCTGCTTTGGGGTATGTAATAATTACTACTCTGTACCTGAAGCCCTGTTTTCC
CATATCTTTTCTTAACTGACTTCTCATTTTTCAGTCTGCCCTTCAAAGCTGCCACCTCGATTTTCTTGGATCTTTTCTG
GCCACCTTAACNAAGTAGCCATCCCCACTTCCAGTTACTCTCCATCCACATCCTCCTTTTCTTTTCTTTTCTGCTAT
AAGTCACTATTTTATGTTTACACATTTTTTTGTCTTTCTACTCCACTAGAATGTAAAGCCTCAAGAGGACAGGGGCTGTG
TCCGCTTTATTCCCCTGAGGCTGGCAGAGGACCTGGCACAAAAAGAGCTCAATACATAGTTATTGAATACATGATAA
GTGACTGAATGCTATCTTATTTAGATAAAAAGAATCATATGATTATTAAACATTGGTGACATGGATGGATGAGGAC
AAAGTACCTTGCAATAAGCACAGAAATAAGGATTTTCTATATTATATTTATTATGAACCATAGTAATGGCGAGAATATCT
CTCTCCCTTTATTATTTTGTCTATAGTGATGGTGGTGGTAGAGTGGGCTAGCACTGCCTCTTAAAAATGATAAGAAGT
CCTTTGAAGGAAGACATCATGCTCGTATTTCTTTCACACTTTTTTTGATATTTAGCTGCTCAATACAAACATGTTGGTG
ATCATTGGTGGAGGGAGTGGGGAGTGGGTGAGGGAATAACAGGCCCTCCATTTGCATATGATTAAACTGGCAAGACT
TTCCAGGCAAAGCAGTGCTTCAGAAATATATGTGATTGACAGAAGGAAGGTCACATATGTACTTTCTAGAAGAAGAGTAA
TTGTCAAGTTGTGTGCTGAGGAGCCTCAGAGCCTCAGTTGGCAATGGCTTATGTGGAAATTTTCATTTGAACAGAGAGT
TTTAGGGCCACACCAAGTGGAACTACTTATTTTCAAGGATTGGAGCCTCCACAGAGAAAGATCAGAGGTGGGAATGAAA
CAAGAAATAGTTCCAGAGACTGCTGCTGTGTAACAAATTATCTTAGAACTTAGCAGCTGAGAACAACCAATTTTTTTTAT
GCTCACGCAGGAAGCTACAGGTCAAGAAGTCAGTGAAGGCACAGCGGGAATAGGTTGTCTCTGCTCCAGCTGTGCAGAC
TTGAAGGGCAGGGGAGACCGGATGCCAGGATGGGGTCACATAAAGACACCTTCCCTCACATGTCTGGTGATCAGGATGG
CTCCGTGTGGCTTAGTGTCTTACAGCCTGGTGGTTGCATGTTGTGACACTGGGTGTGGAGCTCAGGACTCCAAGCA
TACGAGTTCCAGTAAGAAGACGGAAGCTACACTGCTTTTCATGTCCAACCTTGGAAATCACACGGCCTCACTTCCACT
GTCTTCTCTTGGTTGCAATAGTCACAAAACCCACCGAGTTCAAGGGAGATGACATAGACCGCCCTTCTAAATGGGAGGA
GGGTCTAAGAATTTTGCAGCATGTTTTTAAACTAATATTAGGTTGGTGCAAAAGTAATTGCGGTTTTNGCCATTAAAG
TAATATAAGGGGCAAGCGTGGTGGCTCAGCCTGTAATCTCAGCACTTTGGGAGGCTGAGGTGGATGGATCACCTGAG
GTCAGGAGTTTATGACCAGCCTGGCCAATGTGGTGAAACCCCATCTCTACTAAAAATACAAAATTAGCTGGGTGTGGT

53/375

GCCGTGCGCCTGCAGTCCCAGCTACTCAGAGGCCGAGGCAGGAGAATCGCTTGAACCTGGGAGGCGAAGGTTGCAGTGA
GCCGAGATCGTGCCACTGCCTCCAGCCTGGGTGACAGAGTGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAA
AAGGAAAAAGAAAAATGTAATACAAATGTAAGGATGAAAGAAGCAAGCAGAGGGGAAGAGAGGGTCTTGTATTCTGG
AAAGGGAGATAGGCTTGTGACTGCGCGGATCCAGGTTACATTTACTGCACATGTGCCCTGCTTTTTTGCAGCTAGAGT
GTTTTGATGATCTTCTGAGAGAAACGTCTCCTCCCTCAGCTCCAGTGTGCTCGGGAGCTAAGAGCTGCAGAAAAATCATT
TGAAATCTTTGGTGGTCATAATAAAATAGGTAAAGGTACTCTCAGGTACTCAACGACCCTCTTGTCCACCAAGCAGCTCC
TCATCAGAACTTCTCCAAACATACACTCTCTCCTTTCCACCCTCCAGCTCATCTTGTCTGGCCTCCGCTTTTTTCCGTCC
ATCTCATCTCCTGGCCTTTTTTCATTCCTCATCCCTACCTTATTTCCAATTTTCAGTCACATTTGGGTGAACACACTGCTC
TTGGTGTCTTACAGCAAGGAAGGCTAGTTGTGTGAATTTATAGTACTTTTTCAACCAGCCATTGGGAAGCACATGGAAC
TCCCCACACTCATTTTTACTGCCATTTTTTTTTCAACATAATTTACAAGAAATAGAAGGAATGTGTATTAGCTAATTGT
GCCACGTGGTCTTATTTCTCAGCAATACTTATTTTTATTAATGCAGCTGATAGAAAATGAGGCAATTTTCATCAAAA
AGCTTGCTAATGTAAAACTGAGAGTACCAGGCAGCCTGGAATAAAATAAGAAACACAATTTGTAATATTACTATTTTGG
GAGTTTTACATTAACTCCTACACAATAATCAAAGGTGGAAGTGTGATCATAAATTTTAGCTGGAATTTAGGAATGTGG
CAGCAACTCTGGGGCACATTTACAGGAAAATCATAGACTCAAATGGAATTTGCTGAGGACTATATATCAATTTGCCATC
AGAGTAGACAGTATTAGAAACCCTGGACTCTTCCCATTAATCATTGTAGATGTGGCATCTCAACAGAAAGAGAGTTATG
GCGGTTATAAATCGTGCACTGAGAGTTGTTTTTACTTTAGATAGAGAAAAACAGTTGAAAGAGTTTGGGATAGCAGATG
TATTGTCTCTGGTTCCTCTTTTAGTTTTAAAAATTAATTGTGCATTTCAGAAATCCTGTACTTTAAATATTTAGACATG
GCAAGTTTTTAAAGAAGATATGTAGGGCACATACTTCTCATCCACTGCTGACAGGCATCAGGAATGGGGTAAATTTGG
ATAGGAGATGCTTATCCATTCTATGTCACTGCAGATATGAAATTTTGTCTTATTGTTGTTTTGATTTAGCANGAAATAT
CTTTATTATTTTTTTTTTCCAATGATGAGAATGGAATGTTGTAATTAAGTCTGAAACTATGATTTAGGAAAGAAAA
AAAAAGTGCAAGATGATCTATTGCACAGAGAGCCACCCAGAGCCCATCTGTTGGATAGAATAAGGAACCCCTGTGGGT
GTAATTGGGGCAGGAAGAAGGGGCAGGATATGGTGGAAAGTGCTTGGGTTTTGAAGCCCACTTGTTTTGAGTCCACG
TTCTATGTTTTTCTTTGTGTTCTTGAGCAAGATACTTAACCTTCAATAATCTATGATCTATACATTGGGAATAATAATC
ACTATCTAGAAATGGTGTTTTAGAGATTAACATATTATAATAACCTTGGTAAAGTATCTGGCTTATACTCAGTAGAAGT
ATCTGCTTTATACCCAGCAAATATTCTTTTTCAAATAGATGTAGGCCACTATGTTATAATTAATAAGCAATACCATAA
GCATTTGAATGTTTCTGCACAATGACCTATTTGCTGTCTTTTGTAAATTTTCTTAGTTGGGGGAGTGAAACTCCTGAC
TAGCTTTGGGCTGGATATAGCATAGCGGTGCCACCTATGTGGAANGGTTTGAAGAGTCTCGACAGGGCCAGTGACCT
CATTGTCTTTCATAGAGCCAAAAATTGCGCCAGTTACAGATTTCAGTCCCTGAGTTTTGAACAACTTCCAAAATGCCA
GATCTTCTATTATAATGCAAGTATTCTTGGTAGTTGAGAATGGAGGAGAGTTATGAGAGTGAGGTGAAATAGGTTAAGC
TACAGGTTGCAAACTCATTCCTTGCTCCTCTTGGGAAAACCTGGACAGTCAGATGACACATTATTGCCTGGCTGCAATTG
GCTGCAAGGGGCAGCTGCCAGTTTGTATGGGATGCCCACTCCTGATAGGATACTGATCCCTTTCACCTTACTCTTGGC
ATCTTTTAGACATTTTCACTGTTTTCTTGGCCCTTGCAACACCTGAAAACCTTATTGCCCACAGTTAATTAGAGAAGAG
AACTGACAGATGTCAGCCAAATTTAGTTGAAAGCGGGTAGTCTGTATGTGAGAAGGCTCTATTGTTCTTTTATTATATG
AGGTAGGGCAGGTGGCTGCATCTTTGAACCTAGTTTCTCCTCTGTGAGAAGATGGCTTAGAGGTTCCACAATCTCTC
TACTTTTTCTCATTCTCTGGTTCCTGATGGTGATCTGGGTTCTACCTGAAGGGAGCCAGGATTAGAGAAAGGAAGAAT
ATTACAGGCAAACTTGGTCTCTTTCCAACATGGCCCAATCCCTCTTGGCGGAATCTGCTTCAGGGAAGTTAAGCGTTTGT
CTAGAAATATGATGTCATGTTTACGGAGCCCTTATTCCTCCTCTATAAAACAACCTTCTGTTGTCAATTTCTCTGTA
ACTATGTTATCTACTATGCTGACCACAGGGTACATGCTTCCACATTAATGAAAATAAAGAAAATAAATATCCT
GTTCTTGGGCCACACAATCTCATTTCCAGGGCTCAATAGCCCACTGAGCTAGTGGCTAGTAGCTACTTGGCAGAGGAGACACAGA
AAGAACATTTTCATCATCACAGAAATCTACTCTTGTAGAGAGTGCTGCTCTAGAAGCTTTAGGCCACTGAAGTTGTAT
TCAGCGACCTGACATCAGAGAGTTTTGTAGTCACTTGAGCAGAGGTAATGCAATCCCTGGGAAGACTTCCAGTTTCA
ATTACATTACAGGTTAACAAGCCCATTTGTTCCAACCAAAATAATAGTTGCTCAACATTCCATTCTGATGATTTTTTA
TCCAAGCAGTCAACATAGTTTCAATTAATACCACTCAATTTGTGTACTAGTTAAATGAGGAATGAATGTGGCTCTGT
CTCCAGATAAATGAATAGAGAGAGAGACAAAAAAAAAAAAAAAAAAGAATTGGCTGACTCGGGGTGCTGGGTACACAA
AATAACTTGGTTAGGCTGTAGGATCAGAAAATCTCTCTAGATCTTTTTTCTAGAACTTCTTTTTCTAGATCTTCTCTT
TCTGAGGAGAATCGCTCAGTTTTAAACAAAGTGGCCAGTTTACACTAAAATGCTTGTCAATTTATATAAAATATTGGCATT
TGTTGCAATATTGCAACCAAGAGTCATTGAGTTCCAAACTAAACAAAAGTTTTATGAAACAGTTTGTCTGTCCAAC
CTTAAAAAGAGAAGGCATTTACTATATGCCAAGCATTGTGCTGCCTGCTTCACGTGCATTTTCTAATGTGGGTTTCACA
ATACTTTCTTGACAAAGGTGAGTGTGCACCTACCTGCTGGAGAGACAGCATCAGGAAGGAGGGAAAGCAGAGGTTGTG
GAGTACAGCAGACTGGGCTTAAATTTAGCTGTGTTACTTACTAACTTCAAGACTTTGGGCATTTACTTAACTTCTAT
TAGCTCTAGTTTCCCTGTCTGTAAAATGGGGGACATGATACCTGCTTCATGTGATTGTTGTGATGATTAAGTCAGACAA
GGCAAAGGAAGTGTGGTGCAAGACCTGGCACACAGAACATGAATACAGGGGAAGAGGTCTTTTTCTGTCCCTACT
GAATTGTACCTTGATATATTTGGACACTCAGCAAGTATTTGTTGAATAGATAGGTGGATGGAAGGGTGAAGTCACATC
TACAAAACATTTCTCATCTGCAGAACATTTCTGAGTGTAGGTGGTGGCTAAGTACAATGATTTGGGGAGGCCAAA
AGTCTCTTATTCAACCTCAAACATCATCCCACTGGCTGCTGCTATTTTGAAATTTAAGTATTCTTCATTCTATTCA
GTTATATGTCCCTGTTAAAAGCAAATATTACTTTAGAGAGAAGGAACACACTAAGCTATTGTGTGCCATGGTTTTGGTCCA
CCTGCCGAGCCTCCTAAGACAGCACTGTGGAGTGGAAACACCTCTGATCTGGGAGCTGGATATTCTGGCCTCCAGACCT
GGCTGTGCTAGCATCTGGCCTTTCTGGGCCCTTGACCTCAGATTTCTTANTAATTAATGGAGGATTAGACTAGATCTT
CTGTAAATGGTTTTGGTTTTCTGGTTTTATAAGTGGGTTACCAGGCAAGTGAGTTTTCATGTTGAGGCATGGGGCAATGCC
TGGGTTGGATGGCTTTGGAAGGTGGCAATGTGGGGATTATAGCCCTGCAAGGACAGGGAGCTTCTGTCCAATGTGGTTA

54/375

CAGGGTGCCTGATAATAANAGCATAAGGGACATAACCATGAAGGAACAGGGGATCAACAATGACAGTTTTAGGACTGTTT
CACAGCTTTTGTAGATACCAACCTGGTTTATAAACATCCCTTAGGAGTCTTCTGGATATTAAGCATCAACATAAGATC
ACCTGGAATGAAGCCAGTTGACTGCTCCAAACGTGATCTTCAAACCTGGGTGCCCTTATGCAGCAAGGCTTGTGTGTAT
TGTGGAAAACCTGCTCCAGGACATTCTGAAGCGTGAAGTGTCCACTCGGTGGTGCAACCACGGACTGCCAGAAGCTACTGG
CCTGGAGCAACTGGCCTAGCCCATAGAAAGCAGGAATGAAGCAGCTCTTCGTGGCTGTAGGTGTCCCACGGAACAAGGG
TAGAGCCAATTACTGAACACCTCCCACATGCCAGGCACCATAGTGGGCATTTACACACATTGTCTCATGTAACTCAC
AGCTGTTCCATGTAGTAGACATTACTGCCCTTCAACAACAAATGGGGAAGTGAAGTGCAGAGAGGAAAGAAGTAGAGGT
GAGATTTGAGAAGATTTTTGGATGCCAAAATTCGCATGTCTTCCCATGTATGTGCGACAACCTCCAGGATGTTCTGCAG
ATATCACTTGCTGTTATAGTTCAATGTTCTCTACCCATGGGCATTTAGGGTGGAAATTATTGTTCTCACATTATTGCTAT
TTCAGGCATTTGCTGGAACAAAGAAACAATCACCACCAGTGGCCCCATCTACTCTGAGAGAGAGCGTTTGAAGTCATCAG
TCGTATTTCCAGCTGTGAGGTTCCAATTTAAGTTTTATGTTGGATCTTTTTCTCTTTACTCTTGGTTGATTGGAGTT
ATAATCTGTGTTTTCTTCCATTTTTGGGTATTACATTTAGATTTTATTGAGATTCATTTTCATAGTGCTTTAAAGG
TTAACAAGAAGCCTGAAACTCTCTGGGTTTCTTATTAAGATGCAGCAGGGAAGAAGACAGAGTGTTCAGTTTATTGGG
CTAGACATATCTGTGTAGTGACGCAGATGCTGCAACATGTTCTGGGAACCATTTCAATGTTCTGTAATAAGTAGCACA
TTAATCAGGACTGGGCAAACTGGAGGGGTCTCAGCAGGGTTGGAGTTTCTGGGAAGTGCCTATTAAAGATGAAGAATTA
GCCAGTGCTCACGTTTAAACANGTAGACTCCTGAGATGCGGCTGGAGGGAGATGCCACAGAGTGCTGATCAACATTGGT
GCGGATCACTGACGTGTGATCACTTTACCTGTACATCATTCAGTTCAAAGCCTCCCCCTGCCCGTGGGCTTGCCG
TGAGAGGGAGGCTCCATCCTCTTTTTTAACATAAGGGCAGGAGGGTNTGCACACTCCAGAGATGTGTGTCATTTACTCT
TTGCAGCTTCAGCAATTGAGTAGACTGAAGAAAGATGTTCTGTAAGGTGGACTTTCTTTTTATCATCATTTGCCCTT
TTCTAGATTTTTTCAATTGTGAAGTGTGTATATATTCAAGACTTTATATCATGTATCAAAAGCCTAACCATAAATAA
GTCTTGAGTATGCCCACTGTACTGTATGGAGCATGAAGCCGGCTTTTTGTGTCAGTCTCCTTGTGGAACTCCTTGA
AATTTGGGCTTATCATGTCTGACTTTTCTGGACAGTTTTACCACATAAGATAGTTTGCTAAACATCTTCCCCGATTT
AAAATGTGGCTTTTTGTGTAATAAAGCCCTGTGGACTCCATAGCAGTACCAAGTTTACAAAACCTACCCAGTACCAGGT
TTTGTAACAGTACCCCTGTTTGCAAAACCTGGCTCTGTTTTAAATAGCTTAGATGGCCTTTATCCCAAGTCTGTG
TTTTGATTATCTCTGATGCAGAATTAAATGAAGAAATTTGTGCACGAAGCAAACTTCACCTCTGTATCCCCAACACC
ACATGATCTCGGCTCACTGCAACCTGTGCCTCCAGGTTCAAACAATTCTCCTGTCTCAGCCTCCCAAGTAGCTAGGAT
TACAGGTGCCCTGCCACCACGCCCGGCTAATTTTTGTATTTTTGTTAGAGATGGAGTTTACCATGTTGGTCAGCCTGGT
CTTGAACCTCTGACCTCAAGTGATCCACCCAACCTCGGCCTCCCAAGTGCTAGGATAACAGGCGTGAGCCATCGCACC
AGCCCTCAGTTTTAATTTCTATAAATTAATGGATTTTATAGTAGGATGTTAGGACAAGAAATTTATATGTATTACATA
TACTTGGGATTGATAAGAATTTATATTTCTTTTTTTTTTTTTTTTTTTTTTGGAGATGGAGTCTTGCTCTGTTACCCA
GGCTGGAGTGACAGTGAGATCTTGGCTCACTGCAAGCTCTGCCTCCGGGTTACGCCATTCTCCTGCCTCAGCCTC
CCGAGTAGCTGGGACTACAGGCGCTGCCACCACGCTGGCTAATTTTTGTATTTTTAGTAGAGACAGGGTTTTACCA
TGTTAGCCAGGATGGTCTCGATCTCCTGACCTCATGATCCGCTCCGCTCAGCCTCCCAAGTGCTGGGATTACAGGCGA
GAATTTATATTTCAATATAGCAGAAAACCTAATGAACCTTTTGAACCCAGTCCCATCCACTTCTGTTTTACCATTCCA
CATTCTTGTGTAGTGAGTATGGTTCTGAGGCAGTGGTCACTTTGTGANGCAGTCATGAAATAAATAGGAGAGAATCTGG
CCATACTTGTGTTTTCCAGATCCAAAGGTAGGATAAGCCCTCAGATGCTGATGTGAATTTAGTGAGGGGTCCTGATATG
GCNTGATGCCCTTGCTGTTACTCTGGTTGAGCACAAATGTGTCTTTTATATCATATATCCACTTGAGATCTTCAAGGC
AAGCAATTGAAACAGACTTTGGCTGGCTTAGGCATAAAAGTAACTTCTTGAGAGATACCAGGTTATCTGGTGGACTCAC
TGTAAGTTGTAGGAACAGACTTAGAATATGGGTGGGGAAGGGAAGCCAGAGCCAAATTAAGTACACCAGAG
AGCCAGCTTTGGGGAGCCATCACTGCTGCTCCTGCTGAACACTGGGCATGGGGCCGGCACGGCCACTGCTGGTGTGGCC
TTGGATACGGTTGCTTGGTGCTGCTGGACCTACTGGCCTGGCAACTGGCTGCTGCCACCACAGTTGCCAGGATGAAGTT
TCTCTGTTCTCTGAGCCACTGGCCCCGGATTTGAAGCCCCAGGATGGATGTATATCATTTGTCTATGACCATGATCTGTG
CCATGACTGCCAGAGAGTCTGAAAAAGAAAGAATCTGGCTATCTTGACTGCTGTAATGGAAGGGGCTTTGTTTCCCACT
AAGATTACATGGCAGGAAATTCATCAATATAGGAAGGGTTTCAGATACCAGAAGGCCACAGTCTGACAATACATAAT
CAACTCATTTTATCTAAAGGCATTCTTTTGAACCTTTAATTTTCTTCTTGCTGACATCTTTATTCTTTTAAAGCCCTT
ATTAATAGTCTGTATTTCAAGTAGGAGAAGAAAATATAAAGAGATATCCTTCAGTTTCTTTTCTTTATAGCTTTCTTGA
AGTTTCTATAAGCAATACTAAGAGGTAATATAGCCTCTGTACACCCCCACCCCAAGAAATTGGATTGGAGAAGTGAAC
ACACCTTCTGAGAGTGCAACTATAAAATAGGCCTAGAATGGATCAGATGAAAGGAAATAAAAGCAATTATTTAAGTGG
GGCTTAGATGTTGCTTAAACTTGGCTTTTCTCTCTATAAATAATCAAATTATAGATCTCCAGGGACCTAAAATGTTA
ATTTTGGGATGTATGCCCTATTGCAATTCAAAGATAGGTGGGTGCTTAACATGAGGAAGTAGAGTTTAGTGATTACAAA
CAGGGTGTGGGGTTGGACAGACCTGGGTGCAAGTCTTGTTCAGCTGTGTGACTTGGGGCACATTTCTTACCCTCTG
AGTCTGTTTCTCATTTGAAAAGGGCAGTGGTAATCTTTATCTCACAGAGTTGGTATGGGAATTGAATAAATTCATATA
TGTAATCCCATATTAAGTATTTAGTAAATAGCTATTCTCATCTAATCTTCTGTTATAGGAGAATAGAGGAGAAGTTGG
TTCTCTTAAAGTAAAAATGGGTGCTTTTGGAGGAAATGTCAAGCAGAGGTGAGTTGACAATGCAATGGGTGTTGTAGA
GGAAGATCTAGCACTGGGGAGTAAGTGTGGTGGACTGAGGGATGTCCAGGTTCCCTTCGATAGCTAACTCTATGGTAC
AGTAACTCTTGGAGAACTCAGACAAGGATTAGTCTCTCAGCTGGGCTACTCTGATGTTGATGGTGAAACACCAGCC
ACTCAGGCAGTGTCCATCAATGTCAACCCTAATCTGGAATGAAGTACCAGGAGGTAAGGCTGTGGTCTGTGTC
CAACTAGTAACAGATCCGTAAAGTGACAGCCACTTTTACCACCATCATTATAGCTCTGACCACTTCCCTGACTTGAT
TTGGCCAATGTGTTGTGTGAGTGGTGGATGGAAGAAGCTAATACAGCTATGGCCTTCTTCAATAATGGTGAGGTACCAC
TATCATTTGCAAAATCAGTTCAAAAAATAGGAGGTCTTCCAGCTGGGCACTAAGAGCTAATTTCTTGGGCAATTTTTTT

55/375

TATTGCATTCAACCATAGANGATTAAAAAACAAGGAATGGCATTCTCTCCCAAGCAAAACCTCTTGGATTCA
TGGTCTATCCTAATTATATCTTCTGGGGTAATCCTGAGAAATCTTGTCCATTCCAGTAGAGCCTGTGCTGTGAATCANC
TGTAAGAGTGCTCACCTAGTTTGTCTACAGTGCAAGAATTTCAAGGTCTAAACTCTATGAACAAATTGATTAGGGTAAG
TTATTGCCATATAATGTGATTAAATTATACTATAAGGAATTAATTTATCTGATGGTTTTCCAACATGAGAGCTCAGGCAG
AATAGCACAAGGATGAGATTATAGATCTACTCATGATTTTCAAGTACATAATACACTGTTCTTAACTATAGTCAACAC
CTTGTGTAATAGATCCCTTGAACCTATTTCTCTCTAGCTAACTGAAGTTTCTCTATCCTTTGACCAATATCTCTCCACTT
ACAACCTCTCTGTCCCTAGCCCCCAGTAAACACCATTCTACTCTCTGCTTTTGTAGGTTTGAAGTTTAAATTTTACAT
ATGAGTGAAACCATGTGGTATAGTGTGTTTTCTGTGCTTGGCTTATTTTCACTTAATATGATGTCTCCAGATTCCAG
TAATGTTGTGTCACATGACATGATTTCCCTTCTTTTAAAGGCTGAACAGGATTCCATTGTGTATATATACCATATTTTATT
TACCATTTCATCCATTGATGGAACCTTAGGTTGATTCCATATCTTGGCTATTGTGAATAATGCTGCAATGAACATGGGAG
TGTAAGCTATCTCTTCAAAATGATTTTCATTTCTTTTAAAGATCTACCTAGTTCATGGGATTCCCTGGATCATATGGTAGTTC
TATTTTTTAATTTTTTGAAGAACCTCCATATTGCTTCCCATAAATGGCTGCACTAATTTACATTCCCATGAACAGTGTGCA
GATGTTCCCTTTTTTCCATATTCTTGTCTAACACTTGCTAACTTTTGTCTTTTGTATGATAGCTGTTTTAACAGATATGAG
GTGATAGCTCATTGCAGTTTTAATTTGTAAGGGGAAATGCACATTTAAAAATACTGTGAGTGTCTAGTAGTAAATGTGGGA
TCCTAAAAATTTGCATTGGACCACGTGAAGAAATTTCTTTTGTGAGGCCGAAAAATGGGCTAAGAGTCAAGATGACCTAG
TGTTTCGTCTTTGTTTCCATACAATTTCCCAACCTACCTTGAGGTCCACGTCTGAATTTGGCTGTTGAAGGCTTTAATTTT
CAAGGAAGGAAAGGTCTGCCTGGGATAAGTCCGCCAGCAAGTCAGCAGAAGCAAGCCTAAGACTAAGGAAACACAGAT
CTACCTGTTGTCTAAGGCCAAGCTGGCATAGATACCTAACTCTGGGTCTTCTCTGTCTGGGGGCAAAATCTCCAGCCTT
GAATAGGAGTCAGACCTGTTATGGTGGCTTTTACCTGAAGTCCCCTACTACTACGAGGCTGAGGCAGGCTCCCTTGAGG
CAGGATCCCTTGAGCCAGGAGTTTGAAGCTGCAGTGAAGTACATGATGACACTACTGCACCTAGCCTCGACAACAGAGC
AAGACCCTGTCTCTAAAAAGAGAAAAAGAATAAAAAAAGGAGTTAAAAAGTTAATATAGAACAGAGAGAGGGAACAG
GTCTTCTCAGATGGGGTAATCCCTGGTTTGAAGTTTCTTCTAGCCCCATGAGAAGAAGACCCGTAAGAAAAATAAGGAA
GAAGCCAAAGAAATATGTGGCAGGGTCTTTCCAGGTGGCAGCAGCCCCAACCCAGTTTACCTTCCCTGACTTCATAAAGG
AAGACACAGGAGGCTTTTCTTATTTTACTCTCTCATTAGACTCCACCCTCTGCAAAATGTTGTCTAATAATAAATC
TCAGGATCATCTATTTTAAACATATCTGCTCCTTTGTGGGAAGAGTGAGTGTGAAATTTGGGAACATGCGCAGTGGATA
AAGCTGTTATTTTATGCAAAACAGAAAAGAGCAGTGCCCCCTTTGGGTGGATGTAGCCCTGTACCAGTGCACACAGCTT
GGTATTCTCAAAGAAGCCCAAAAACAACCAAGGAGGCTGTTCCAGCTGGGCACTAGTAGCTGATTCTCTTGGTAACCG
TGGGCTGGGTTTTAGCTNTCACATGCCTGCTTGAGCGGAGTACCTTTGTGTGGTAACAACCTGGACCACTCTACATGG
TCCCCTGGTGGTGGTAATGGGCAGGCTTAAGCGGTGTGATATTGGTTAGGGGGCTCAAACAACTCATGGAATGGGCACC
TAAGCAAGGTAGAGAGATGCAGAGCGGGAGGGAGGAGTTCTGAAGGGGAGTTTGGCTTGTGCTTTTTTTTTTTTTTC
TTCTATCTTGGCACCCCTTTATTAACAGAACACAGTGTAGATTATGCATTGTATTTTGAAGAAAGAGAGAAATAAAGG
CGTAATCTTTGCTTTTGTAGATGTTTTAGTCTAACTCAGCAATTCCTTTCCCTCATCTTTCTGCCTCACTACTTATTA
CATTACTTCTAGTTCTTCTCTTTAAATTGAAAAAGCAGAGGCAAAACCAGACACTGTGATAATGGAATTTTATGTTG
TGGTCTTTGATTACACTTCCCTTCCAAAGCTTCAATATTTTACATTGTTAATAATAATGTTCTTTGTAGGAAAAATCC
TTAATTTGAAAAATGTTGCAGATGGCCTTTTATCAGGAGCTATGGAGTGTCAAATAAATAGATATAATTATGAACCATT
GTTGTTGAATGGGCCATCTTAATAATAAGCAGTCAAGTTTCCAGAAATTAATAAATAAATTTACATTTTAAAAAGAC
CTCAGAATAATTAGTGGTCTCTGGTTGATTGGTTTTCAACAAGTTATTCAGCAGATGGAGGCTGTGAGATTTCTGCTGG
TACGATTATTTTTGTAACCTAGTGGTGGAGGGGGTGGTTTTATGCAACTCAGCATCACCTCTTGTGTTGAATTTGAGATTG
GTTTAAAGAGAAATCCACCGCACCTGTACATTAAGATGGAGCATGAGGAAGGTCTTGGGACCGAGCCATTTGAAGAAAT
CTAGGCTCNGGTGGGTCACTTTAGGAGTATTAGTATAGCCTTAGACATTAGCTCTTGGAACTACCCTGAAGGCGAAAT
GTGAGACAGCTAATATTTCTCTGCAAGAATTCCTTGGGTGCTGAGTTTGGTCTTGGCCATCAAGAAATGTTTGTAC
CGGAGCAAGATGTGGAAGAACCCAGATGAGAGGATATTAATGTAGATTTCATGAGCTCTGCCAAAGTAATGTCTACTG
CTGCTCCATCCCTGAAGAAAGATCTTAAACATATGTAAATAGACAAGACAAGTTATAAATTGTAATTTAGTATCTGGTA
ACTGAAAGTCTTTACTTTCATTTGTACTGAGTGATTACCTGAATTTACTAAGGAAAAATTTGGAGGTACAGATTTGAGT
TGAAGTCAATAAAATAGGATAAAAGTCTAGATGATGAACTTAGCTTTTGTGATTAGAGTTCTGTTTAGCTCTTAAAA
CTGCAGTAAATAAAATGTTATATTAGTGGAAAAATACAAATGGATTGAGAAAAATATAGACAAATCGATAGGCAATTGAAA
TGTATACATTTTATTTTCAACATATCAAACTCGAGTTCAAAAGTTCTTCATAAAAAACAAATTCCTAAATTAACCTTTAC
AATAACTGTGAGCATTCTTATCCCCATTTCAAGTGTACAAACCCAAAGTTATGGGGAGAAAACTTTAAAGGAGGCAAGA
GCTGCCACTATAATTTAAAAATATATTGTTCTCCACTCTTTTTACATATTCTTGAAAGCAGTTTCAATTAACGGTGACCTTG
TGTAGGAAAAATTAGCATTTGTGCCAAAAAATCTTTGTATGTGTTAGTTTGTGTGCATATTTTGGAGTCTTCATGTTA
AAAGTATAGGACAGCACTACTTGACAAAGGTGAATTTTGTGCAATTTTGGGGAGAAATATAGATTTGAATTCATGTAAA
TAAGATTGAATAAAAAATCCAGATGACTGAAACATATTTTCTCTTTTGTCTAATTAGAGCTTTATTGAGCACTTAAGCTGC
AAAAAATAAGAGGTTATATTAGTAGAAAAATACACATGAGATTAGAAAATTTAGGTAAATCTGTAGATAATTGGAATATA
ACTCAGGAAAAACATTCAATGAAACCTCTTTTCAACACATAGATTAGTACCCTAAGAGAGTTAAATTAGTGTTTTACTG
TGAAACTATTTTCTTCCACACCAGAATCTATTGTATGTTGGCAAGAAAAATGGACTAGCCATTATATACCAAGAG
TTTATTACTTACTCTGGCCACCTCAGTGTTCAGTGGGTACCTAAAGTGAAAAAGAGTTTAAAGTGCTACTTTTGCAGAT
TAAGTTTGTAGTGAATCCAGGGATATTTGCTGTGAGTGTGGCAAAATGATTATTGTGGAATTTGTTTGAATTTGAATTT
TTTTGTTGCTGGCAAAATTCACATTGCCAAGTCTCTCTTTTAAATTTGAAGAGTATTTTAAAGTGAATGCAATACAAACA
TATCTTATTCTTGAACCTCTTGATTAAATTTGGTAGTGTTTTTTATTTGTAGTAGGCTACTTATAGAGTTCTTTTTTCAT
AAAACCTGAAGGTTCTTCTTCATAAATCTTGACGCTTCAAGGGGAAAAAAGGAAAAAAGAACTTATTTCTCTTAGA

56/375

CCCTTACTGTACACCTCAAGTATTGGACACAATGTGCGATGCTTAAAGACTCTCTTGGCTTAGAAAAAGCCTTTCTCCT
CTCTTGGCAAATCAGGCAATGTGAAATCAGTAAGGGCCCAGTTCTCACTGTTTTCTATGAAGTTGTTCGGATGTGTGA
CACATCCACCTTATGGAGGTTAAGTTGGTTGTGTCTTGAGGCTCACAAAAGCAGGTTGTGGAATTGGTATAAGCATT
GATTTATTTGAACATATCTGGTGGTGTGTCAATTGACTGACCCCTCTGTTATAAGCTTTCCTTCAAAAAAGTCCATCAG
AGACTTGAAGTTTACAATCAAAGCTTTGTTTACTGGGCATATTTTTCAGCCTCAAGGAAATCTTCCCTGGCTCCCTGT
AGAAGCAATAGTTACACCTTCCCTAGGGGAAGAACCCGTTTAAATGTGTTGCACATCTTCACTCTTTTACTTGAATAA
GAAGTTTACAATCTTCCCTGTGGTATCCTTCTTAGGGGAAGTCTAGGAAGAAATGTTTGATCATGAGAGTGGTAACTGG
AAGCATGAAGTGGAGTACGGTGTTCCTTAAAGAAATTTTGTCTAAATTTTTTTTTTAAATGGCTTTCCAGAGGTCA
GGCAAAGGCCAGTTTCCCTTGATATTGGGAATTTTCAAGGTGGGATTAACAAAAGGCTAGAAAATGAAGATGGAAGGG
ATTTATAGCTACATAGCAGCATGGACAATTTCTAATGTGCATCTCTAATTAAATATTGGTGTATTAGCTTATTAA
TTACTTCAACAAATATTCATTGAGTATCTCTGCCAGGCAAGAATCTGGGCACCAGAGTTACAAAAGTGAATGAGGCACA
TTTTTCTTCCCTGAGGGAGCCTAGAAGGAAATATACAATTAACACTACAGTCATTGTTTCTCACACTACCAAATGAAAGAGG
TGAGGCTTACCTGTTTCTCAATGTCGTTTTTCTGAGGACAAATAAATGAAGAACTTCAACTAGAAAAACAAAATCA
TATTCACAGTTGGATTGTCTGTACAATATTGTCTCAGTAAATCATGTAATGGTATTATAGGACTTGGACTGAGTGTGA
CATTGCCAATTTCAAGTTTGTAAATTTGTTCAAACCTTGCAAGTGATAATGTGGTACTTTATTTTGGAGGACAAAACAATAA
AAACCATCAGTACAACTCAGGGTATCTTTGGTCTTAGAGATCTCTATTACAATGATTCTTACACTGTGTGAAGTAT
GAAAGTTCTATAAAAAGATTTCTCCACAATTCATTTTATAATAGTCTGTGATAGGTTTTTATTAACCTTACTTTTCTG
TTGAAAATATGGAGTCTCAGTAATGTGATTGAGTTAGTCATCCAGGTTATAAAAACCAACAGTTTTCAGAGGGTCTTG
AATGAAATATCTTCTGCTTTCAATCCAGGGAAGTTTGTACTATACCTCAACAAGGACTAAAGGTAAAGGGCTAAACATG
GAACATCACAGCTATCAAATGATGAGAGAGGCTTATCACTTCTTAGGTTGCTCAAGAGGATGATGTGAGCAGAATAA
TGGCCCCCAAAGAGGTTTATGTTCTCATCTCTGGAATCTTTGAATACGTTATAGGACAAAGGAGAGTTAAGATTGTGGA
TGAATTAAGATTACTAATCAGATGATCTTATAATAGGGAGATTATCTGGATTATCTGGTGGGCCCAATTCAATATT
TTAAAGGTAGGCAGGAAAAGAGAGGGGAATTGTGACTAAGGAACTAAGGGCAGTAGTCAGAGGGATATAACATTGCG
TTCTTTAAAAATGGAAGAAAGGGCCACAAGCCACAGAATGTGGATGATCTCTAGAGCTGGAAGGGCAGGAAAGAGAA
TTTCCCCTAGAGCATCCAGAAAGAACTCAGCCCTATGAACCTCTTGGTTTATAGCCACTGAGACTCATAGGACTTCTG
TCCTATGGAAGTGTGGCATGATAAACTTTTGTGTTTTATGCCACTAATGGTAATTTGTTAAAGTAGCAGTAGGAACT
AATCTGCGGGTGGCTGTTAGAGCCTGATTTATAGCTATCTACCTTCAGAGCAGACAGTGTGACTGGGAGCCCCCTGTG
ATCACCATGTGGGATGTTATAGGTTAGATCAATCATTTATTCAATTATTTATTAATAAACATTTATTGCACATCTACT
TGGTACAAGTCACTGTTCTAGGCCAAACAGTAAACAAGACATAAAAAATCTTGCTTCATGAAGCTATCATTGTAGAAG
GGGAAAGATAATAAATAAGTAAATGCATCATATATTAGATAGCGATAAGTGATGAGGAACTGTGAGGAGGTAAACAGT
GATAGGAAGCAGTGTGTGTGTGAATATGCTATGTATGTGTCATGTTTATATTAGGTTTGTAAATTTTAGATGG
GGCTTCTAGGGCAGGTTCACTGAGAAGGTGATATGTAATAAAGACCCGAGGACTTCTTTTAGGAAGGAAGAAACAGCC
AGTGACTTTCTATCCCAAGCAAAGGAAATGCAAAGGCTCTGAGGGCAGAGGGTTCCTGGCACGGGAGGGATGGGAGATG
GTGAATAGGTGAGAATGTAGGTAAACTTCCAAGGTGCCAGGTTGATTTTTTAAATAGTAGCTTATATTCCCCCTCAGG
CCAAGCCTTGGAGATTTTCTCCTCAGCTGGTGGTTCTGTTTTTTTTTTTTTAAATTATCATTTCTACTGCAGAGA
AAAAGCAGACCATTTCCAAAGGGCAGCCTAAGGGAGCTGGAGGCAGAGAGTATCAGAGAGTGTTCAGTGTGATAACC
AATTTTATGGATCAGTCATTTTAATTAATAAGGAGAATGGGGAAAGTGATGCAACAATGTAAGTCTGTTGGTGCATT
TCCTTGAATGTTGAATACCTCTTACTTTTCAAAGGGTAAGGAATTTGGTTAGTGACTGGAACAGGCAGAATTGGGGTT
GCGCTAAACTCAACCAGAGGTCACAGAGTACTGTTGGCAAAGGTTGGCCTCTTTTTCTTGCTGCACGTGGCTCGTATTT
AATATACTACTGCAGATAACTTTGATCTCTCTGCCCTTTAGACAGAAGTCACCACCCTATCCCCCTAAAGCTATTGGC
TAGCATTCTTTAAACAAGCAGGCTGCACAGAGCTCCTCATGTGACTCCAGCAGGGGAGGAAGGGAGGAAGTTGCATGG
GTTGGACACCCAGAGCTAAGAAGTAGAGAGATGTAGGTAGAAGGGCCAGCCAATTGGCAGCAGTAGGCTGCAACAGCCA
CACACTTGGCCCGGAAGTGGGAAATAGGAGGGATGCTAGAGCTTGGTTTCTAACATGGCAAAGATCTATGAGAGCGAG
AGAGAATAGTAATGGAGTAAACCAAAGGAAGAAATAAGATGCCCTCCAGAGGGATATGGCAGCTTTAAACATGGCCTCA
AAATCCTTTGACACTCCTTCCATCAAGAAATGGGGTCTATGTCTCTTCCCTTGTATCCTCTTGTGACTGCTTGACCAA
TGGGATGGGGTAGAGGTGTGAGTTTCTGGTGCAGACCTTCAGAAATGGGTCTTCTACTTTGTGTATCCTGAGAGGCT
TGCTCCCAAGAACCCAGCCAACATGTTGTGAAGAAGCCCATAGAAAGGCCCGTATGGAGAGGAACTGCAGTCAGCCATG
TGTGAGAGTCATCTTTGAAGCAGATCCTTCAGCCTGTCAAGCAATTCAGCCGACATTACATGGCACAGAGATGAGCTG
TGCCTTCTGAGCCTTCCCCAAATTGTAGATTGTGTGAGAAATGAAATCACTGTTGTTACTTTTCACTACTAAGTTTTAA
GGTAGCTTGTATATGTGAACGATTGTAACAGGGTGCATTTAGGTGACTAGGAAAGAGAAATACCAGGTTTCATGCAA
TATTGAGGTTGCTTTGTTATTCAAGTATATAAAATATAAATCATATGATTAATAATTTTAAATCATTTAGAGTTTTTT
ATTCTCTCCTTCGAAAAATGCACATATGCCAACCTTTTGAATACAGTTTCAAGAGTCTGAATACCTTCTACATCCATCC
ATGGGCATAGACTCCAAGCTGAGAACCTCTGTGGTCAGAATTTCTTCTCACTACTGTGTTATAAAGTGAATTTGGTGT
AAGCTTAGGGAAGGAAGAGGAGAGACACTGGACTTTCTATTGTTAGACTTGTATTTTATTCCAATCCTTTCTATAGAT
TTGCTCTTTGATTGGAGATAAAGTGTAAACCTCTCTATATCATATTCTATATCTATATGATATCTATCATATAATTT
CTTGGATGGCAAATGTGGATTAAAATTTCTGCTCTTTCTTCTCAAAGGAATGTTGAAATTAAGAAAGAAAGAAAGAA
AGTGAATATGCTTAGAAAAGCCATAACTTGCCCATAGAGGTACACAATGAATATTTGTTGAATTTTGTGCTGCTTA
TTGATAATGGATTACTTAATTAGGTGCTGTGGTGTATGATATAGATACTTGTTCATCCATGGTTCTTGGCTTCTA
GCTCCCATAACTCTTGTATAATGTTGGGGCACTTTAGGCCCTCAGGAAACGGAATCTTCCCTCTAACCTTCTCCTGTC
CTCCTTTCACTTGGCCAAGGCAGGACTCTAATCTGATTGTGCGGTCAAATAACCTCATTCAGATCCTGTCTATGACAG

Fig. 6.51

57/375

GCACATGGATGAAGCTGGAAGCCATCATCCTCAGCAAACTAACACAGAAACAGAAAACCAAGCACCCGATGTTCTCACT
CACAAAGTGGGAGTTGAACACTGAGAACACATGGACACAGAGAGGGGAACAATATACACCAGTGAGGGGAGGGAACTTAG
AGGATGGGTCAATAGGTGCAGCAAACCACCATGGCACATGTATACCTGTGTAAACAAACCTGCACGTTCTGCATATTTAT
CCCATTTTTTTTTTTAGAAAAATAAAGAAAAACCCCAAAAAACCAAAATACCCCTCATTCCAGAAAGAGTCCTGCTCTA
TACCTAAGAGGAATGAATGCTACACAGAGAGGCCAAGAAAAGTCTGAGTAGATAGGCATTGATGGGTTTAGATCATGCA
CTTTTTGTCCAATCACATTTCTACAGGGTTGTCAATCATGTTTATGTAATGAAGCCTCCATAACAACCAAGAGGATTG
GGTTTGGGGAGCTTCCAGATAGCTGAACACGTGAAGGTTCTTGGAGGGTGGTGCATCTACGGAGGACGCAGAAGCTCAT
GCATCTTCCCTCATACCTCACCTACACATCTGTATCCTTTGTAATATACTTTATAATAAACTGGTAAGGGTAAAAGTG
TTCCCTGAGTTCTGTGAGCTGCTTCCAAATCCAGTTAATCAAACCAAGAAGGGGTGATGGAACCCCAACTTGAAG
TTGGTTGGTCAAAAGACACCAGACTTCTGACTGGTGTCTACAGGTGGAAGCATCTTGGGACTGAGCCCTCAACCTATG
GGATCTGATGCTATCTCCAGGTAGATAGTGGCAGAAATGAATTAGAGGACCCCAAGTTGGTGTCCACTGCTTGATGTGT
GGGGGCAAACTCCACACTTCGGGTAAACAGAAGGCTTCTTGTGTGATGACTGTTGTTGTGGTGGCGTGAGAGTAGA
GGAAAAACACGGTTTGAGAGAGCTTTTCTGACACAGAAGAGCCAGACCTTTAAGGGCAAAGTTTGTCCATAAAACAAC
CCTAGAACAAGGTCCCCAGGGAAAAAGCACCAAGGGTATAGGAGTGGAAAGAGGGGGTCAGTACAGGCATCTCTGCCC
CTGTACCCCATGTTACATTTTACCCTCTGTTATCCTTCATTTTATAGTCAGTGTAGGGGAAGTGGGAAATGGTAACA
CGCAAAGATTGGTATCAGTTTACACCAAAACAGAACACACTGCTGGTGAGCACAGGGAGTTGGAAACAATATACACAAA
AGTCTCACAAATAGAAAAGAACATGGATACTGGCTCTAACATTGACGTCAATTGGGATACAAAGTCTATTTACATTGTT
TCTTATGAGGTGAGCAAAACATTTCAAATAGCAACTCCTTGGCTGCCTGCAGTGGGTCTGCAAAATGTGAAATAAAACAT
GAAGTGCAGACCTGACTTATGAGCAGGACGTTCCAAGTTTCTTCTTTGCTTTTTCTGTAACAGATGCAACCTGTCTCTG
TTACTGCATTGGTAGATTTTTATCATCTCAGATGAAAGAATCCTAGTGTGGCCAGGGCAAATCCAAATCAGAGTGCATG
GAGAGGCAACACCCAATGTTAAACCTGATCCACTGTGGTTATTTTTCTTTCCATTGGGAAACTATAAGGATGCAAAAT
GGGCAGGAGAGTAAAGCAGCAATCACGTCTGCATGGACTGAAGGCAATTTAGTTTCTATCAGACATGGTGACAGTGAT
CAATGCATCACAAATCACAAACAACAGATGCCAAGCACAACTGTGTACAGATCCAGATCAAAGATATCTACCATA
TGTTTAGCTTTTACATCAATGTACATCAAGTCAGTTTGAAGTGAAGCCTTTAGATATACAGTTTATTACTTCTTTCT
CCTTTTTTATCCTCTTTTTGTCTCCAGGAAGTTCCAGAAATCCGAATTTAATCATTATTAGGTTTGGGTATATTTGCAT
ATAAATGCATTGCTTGTGATGGATCCAGTGAAAGTTCATGCGCAGGGCTGCCCCTGCCCAATGCTGCAGTGGCTTTCTG
CCCCATCAGTGCTGGAGCTGGCAGAAACCCCTGCGAGGAACGGAAGCAAGTGACCTAGAGGGGCTGCAAAGAGTCT
TAGGAGGGCAATTACAACACGTGTTTCTTCTTTAGGAGTATCTAATTGGGTTCAATGTGAAGGCAGCTCACTGTCTAG
GCACATAGAAGAGACTCTGAGTTAGAGAGGTTGAAATGTGGTCAAAAAATATCCATGAATGTATTAAATCCATAAGGAT
TTATTAGGGGCTCTTAAGCATTGATTCCCTTTAAGGAAATCACTGCTAATAAAGAGGCACACAGCTTGAGAAGCTGAA
GCAGAGTGAAAAAATTGATTTATAGCTCATAGGTAGAGAAAGCAAAATTCCTAATTAGTCATTTTTTTTTAAAGCAGC
TACTAAAGGGAAAATTACTATATATTTTTTCCAAAGTTTCTTGGTCTGGCTGTTGTTGCCATTTAATTACAGATT
TATTATTTATTTTGTATAATATATAACTCAGGAATTATTATTATTTAATTTTTCTCTTTTTTGCATTGGGCTTGGT
GCTGGGGAACAGAGACAAATTATGCAGAGTCTTTCTTGTGGGAATTCACACTCTGGCAGCTGGGTAGCCATGTG
CACAAACAACACTGTGCAATTTGATGAGAGAGACAGAAGGCAGGGCAGTGGCACAGGTGGAAGTGGCCAGCTAGGGTA
CAAGGAATTGAGGGAAGGCTCTTGAGAGAGAAAGAGATCTGAGAGCTGTATCTTCTAATAAAGTGGTGTATTCCAGGT
AGATGAAAATAGGATTGGGAGACAGAGGTGGAATTCTGAGAAGGGGGAGTAGTAAGTACAAAACAGAGGTGGCAATAG
CATTATGGACTTGGGGACCGTTAGTAGGTTGATAGGATTATAGCACATAAATATTAGACCAGAAAGACTGAGAAATGAT
GCTGGAGAAAGAAAGTAGGACACAGGTCATGGAATGACTTGCAGGCTGCACCAGAGGCACTTGGATTTTATGAGAGCCTT
GGAAGGTTTCTGTGGCAAGTGTGCCAGTGCCCCCTCTCATATCCCTTGGCAGTCACTGTTACTGTACAAGACAACAGC
TACAAGTCTCAGAGACTCAAGTTTGCAAGACTGTAATGAGGCAGGCCCAAAGCACCAGAAGTTAACATCCTTGAGAGC
ATCGCTCAGACAATGATGCATGAATAGCTCAGATTCCTCACCCCTGGTGAGGATGAGTCTGCAGCAGGTTTTGTATAAT
ATCTTGGAGGTTCCCGGTGACATTGAGTCTCACCTGATCACAGCAGTTGTCTGGTCAATTTACACACCAGTATTGTTCCCT
TCCCATACTTGCCATTCTTCCATACCCCTCTACATTTTGTCTTCTGGAATCCCTTCTCGAAAACTACTCATGCTTAAA
TTCTTAGCTCAGGCTCTACTTCTGGTGGAAATCCAATCTGGGACAGGTTTTTGGCTTGTGGAGGAACAGTGGCAATGAAG
GCGGAGTCTGGATGATTTTATGAGAATGCAAGAGAGAGTGGGAAGACTCTGGTCAATTTAGAAAGCACAGTTCGTTGC
AATTATGGCCAAGCTGTATGTATTCTGGGAGACAGGGAAGGACTTTTCGATGATTCAAGGTTTAGGTTTGTGACTGGT
GGGATCCATTAAAGCAAAATAAGGAATACAAGAAGAGGAATAGGATTTTGGTGAAATGTGTGGGATTTGGATTTGATTA
TGCTGAATTTGAGGTATTTCCATGGACAGTGTAGGCATTGGGGAAGAGGACTAGTTGCGACACCCCAAGTTTGGAAAGCTG
AGCATCAGCCCCTGAGTAGTAGTAGAAGAAGTGGGTGTGGCTGTGGTCACTCAAGCTGAGTGTGGGGATGGGGAGTAGG
AAGAACCCAACAGAAACAAACTTCTGGGAGTACCAACCTTTAACAATCAAATAGATGAGGAGGAACCTGTACAGTGAA
GGAGTGATCTGTAGCACCAGGCAAGGGCCAGGGGAGTGATGTCGTAGAAGCCAAGAAAGGAATCATGTCCAGGAGAGA
GAGGAAGCAACAGAGTCAAAGACTGCAGAGAGGCTTGGCAAGGTGAGACTTCAGGCTCCCATTTGGAAGTTGA
GTGGTCATTGTTTATTTAAGAAGTTCATACTAATTTGGATCAATTAGAAAAGTAGTAGAGATTACCTCCACTTAAGACA
TTTAGTTTTTATTACTTGAAACTAGGCTAACCAATAATTGCCTAGGACAGGGATTGCTTTAATGAATAGGTAAGAATAA
TTTCTAATTATAGGGTGGCATGATTTGCGTTACCATACTGAAAAATGCTGCCCCCTCTATTTGTATGATTTGTATGAAGT
TCAGTACTTGGAAAGCTTCAAGTTTGTTCACCTAATTAGGTAAGGGTTTTTCTTTTAAGCTAGTTGCTGTTTTTTAGTT
TCAAGTTGGTCCCATTCTGTTTGAATTATCACAGGTTTCAATTTTATGTTGCCAAAAGATAAGATTTAATACCATAG
CTGATGCCCCCTTTGAAATTTGAATAACAATCTATTTTCTTTTATACTATTTAGTTATTTGTGGTTAAGAATCTGGTCTG
TAGAGTTAGACTGCTTAGCTATTACAGTAGCTTCAACACTTACTCTTTAAGATCCCTGGGTAGGTACTGTGCTTCTCTG

58/375

TGCCTTGATTTCTCATCTGTAAAAATGGAGAGAATACAACTTTTTTTTTCAGAAGTTAATTCCTAGTACCAAATGAGCTAA
TTCATATAATGTATTTAAAGGCATTTTAAATGGCACAGAGTAAATGATCAGCACATTTTAGCGTTAGAAATATTTGTTA
GTATTTTTTCTATTTATAATTTGTACTATTACTAAAACTGGGAGGCAGAAATAGTATAAAGTGATAATGATTGAACATA
TAAACAGATTAGGGTTCTGCTCTCAAATTTCCGCCAATCTCTGAACTGGGACAAAGTCCATTACCTCTCTGAGTTC
ACATTCCTCACCTATAAAGAGGGAGGTTAGAATAGAACATCTTTCAAGCCAGCCTTAGTTTAAATATTCTGGGAAGCA
CACCTTTTGCTTGAAGTAGCTGATTTACACAGTAGTCTTAGCTGTAGTGTGTTTTCCCTTAAGGGAAGATAAATGGG
CTAAAAGGAGAAATGGAAGGCATTTCCATTAGGCAATTGCTTTCTGGAAAGTACAATAATGTTTTGGTTGGTTTATTT
TCATAGAATTCATTTCTTGGGCTAAAACATAAATCAGTTACTATATTAGAGGGCTTATCATTTCTTTTTTGAGTATAC
TTATGGTTGGAATAATCCAAGTGTTTTTCATTTTTTTGCCCTGTTTTTTCATACCTTTTACAGAAAAATAATGTTTT
TAGTGCAATTCATTTTCAATTTGCTAATGTTATAATCTGTACAAAACAGCCCACTAATTATTCTTTTAGATGTTAAACATG
ACACATGTAAATAAAATGATAATTATAGAATGTGGTGTGTTTTCTGTATCTTACATTTTTTAGATCTGAAAATTGGTCCC
TGTTCTTATTCTGCATGTACTCCAGTGAACTTTCCCTTGATGAGTTATTTTTCATGCGCACACATGGGGGAGCTTTTG
AGACACTAGTTTGAATGTTACACTTTGAAGACTTTCTCAACAACCTTGACCCTAAGATGATGGACTGGAACCTTTCATTG
AAGGAAGTGTAGCAGGGTGCAACTGGCTGTAGAAGTACTTCCCTAGCGCTCACTGTCTCATATGCAGCCCTAGAACCA
ATTCTATAAATCTCTTTGAAAAGATAGCCATAAACATGTATTCTCTCACACAAAAGAGTAGGGCTAAGAAAATGAAAACGA
AAAGTGAAGGCAGATCCAGTATTTTCTAAAACCTCAGTAAGAAGTACCTGAGGTCATAAACTTGGGGGCTGCCCTCTTC
CGGTGAAATGGGGGAAGTCAGCCAGAAAACCTGTATTTTGACAGCAACATTATTTAAAGGAGTTTCTGAAATGATCAAAAC
ATGTTCTTCCATAGAAGAATAAAAGTCTAAAAGCACATGAGAATATTTTTAAAAAATCACCTCTGGAGGAAGCAGAAAC
AAAAGTGAGTGGCTTGAGTTGAGTCCGATGCTCTTGGTGTCTAGCTCTGTTTGCCATTTAAAGAAAATGCAGAAAAATA
GAAATGTGTTAAGTGAAATGAAACCCCATAGGACCTTGACTGACTTTATTGTTATCTTTCTTTTGACCCTAATTTTTTG
GGTAGCTAAAACCGCAATAAACATATAGAAATAGACCTGGTGTAGCCACATAGATACATGAAGTAGCATCAGGAATG
ACTGGGGCTTTTTCTGCCCCAGTTTATTTGGAATAACTCCAACTATTTTCATATATAAATATATATATATTTCAATG
CTTATCATAATTACATCTGAATATTTTGCTCATAAGACAACTTCTAAATGCCCTTAAATGAGGCTTCAATGAGGAAA
TAAATACAGCTGATTTTAAATGTTATTTAGTATCAAGAAAAACTCTTTAGCAAATATTTCTGTGAAAAGTATACAG
TATAACTAGCTTAATATATAAAATTAACAGAATCTTTTCATGATGAATTGAAAATAGGTAAAATTTGTTTCTCTCA
TTGTTTTTTTCATATGTAGACAGCCAAGTTTTCATCCTTCACAGTTTGTGTTCAACTCCTTGCTGTTTTTTCTCTAATCT
TTTCTCAGTGCTTATTCATTTCTCATGGTTTTTAACCATTAACTATATTCCATTCTGGGCTTTTCATCACAGATTCCAG
TTGTACATTTTCTATTGCCCATTTGGATGTTCTTACCTGGATATGGAAGTCAAATTGAATGTCAGCTACCAAATTTACCT
TCCATCTCCACTTGCTTCTCGGCTTCTTTCTTACCCACCCTCCAGCTCACCAGTTCTTCTGACTTTCCCGTATC
TGTTCACTAACTACCATTTTCTGAATCACCTGGCCTTGGAATTTGGTGTCTATCTTTGACATTAACCTGTCTCATGTA
CACTACTGTATCAGGGGTTCCCAAGGCCACCCTCAGACTTGCTAAAAGGATGCATGGGACTCAGAAAAGTTGTTATAGT
CACAATTATGTTTTACTTAGTGAAAGAATACAGACTAAAATCTGAAAAGCAAAAGATATGTGGGGAAGTCCAGGAGA
AATTAGGTGCAAGCTTCTAAAAGTTTTTTTCCAGTAGAATTGCACAGATGCACCTTAATCTGCAAGCAATACCGTGTGA
CATATGCAAAGTGTGTCAACCAGGGAAACACTTGAGCTTTGATGTTTTTAATGGAGGCCAGCCACATGATCATGCAGC
ACCTGTATGACTTACCTCAGCTACTCAGACTTCAGCTCCTCAGAGAAGGAACAGGCAGCCATCATGCATCACATTGTTA
GCATAAATCTGATCAAACTGGTACCACATGCTCCAAGGCCTGAGGCATACAACACTTTACCAGGCAGAAATATACC
TGTTGGCTCAAGGCTTACTCTCAGGAGCTGGCCTAAGTTTCACTGTTGAAGAGAGGTTTTTCTTGGGCAATGTCAGGGCTT
GAGCCACCTAGATTGCTGAGTTAATCTTACTACACATGCACGAAAAATCACCAGCTTTGTTGGTTACTGGGAAAATT
CAGAGCACATACTGTGGTGTAGATATGTGTTTGAAGTTCTGCCTTTGAGACGATTAAATGAGATGTGATTAACTACTG
CTGGACACATAAATACTAAGTGATGTGATTTCTCGTTGTTGTGATTTTTATTATCTCTGCCCTTTTCTATCCAATATC
ACTTCTTATGTTTAGCCTAAGACCTTATTGTTTACCTTCAAGGTGCACTAGCTTCCCATATCAGTGAACCTTAGGATG
TTACGCTGCGCTAACAAACAATCTCCAAATTTGGTATCACTTGCTAAAACAAGAGAGTTATTTCTTGATGCTGCCGTTTG
TCTATTATGAGTTGACTGCAGCTCTGCTCCAAAGTATAATCATTCTGGGACCCGACTGAAGGAACAGCCCTGATCGGG
ACATTGGGGCAAAAAGAAAAGAGCGTATTATAGAACCATAAAATGGCTCTTAAATTTTGCTTGAAAGTGGTGCATATA
CTATGTATTCCCATTTTATTGTCTAAAGTAAGTGACACATCCAGCCTGAGGTTATTGGATTAGGGATGTATACTATTC
CCTTGGAATGTTTGAGCAGTAATATAATCTATCAACTTCTAGCTGACCTCTGTGTTAAATGATCATTAGAGTATCTAA
AGAGGCTGGAAGCAGAGAGGCCAGCTAGGATACATAATCTATCTGCTGACCATCACTAAGTTCACATCTCTCAAAGTT
CAGTGTGACAAACCATTTCTGTTCTCTATAACTGCCGTATCATGTTCTTCTCTTGATTAGTACGTAAGCTCATTTTT
AAGCTCAATCACCCATGACTTTCTATACGCAAGTGAAACCATAAAATTAACCAGCATCGGGCACATTTTATCTTAGCA
CCTTTTATACCTTTGCTCATACTTTCACTGAGATTGAGGGCTCTTTTTTGAAGATAGTTACCATTTTATTACCTTTGA
ATTCTCCAGAGCCCAGGTACCTTACCTGTGGTCTATGGCTGAAACATGTAATCAATTAATGTAAGAAAGTATTGTCCC
AGTGTTCAAAGAAATCCAGGTGCTATTCAATGACAGTGAGACGTCAGGCCAAGGGGGTGAAGGAGGCTGAAACCCAG
TCCATGCTTTGCTCACAAGCCAAGTCTGAGATGGGATGAGGAGAAAGAGGTGTCTTTTTCTAATCTCATTAAGCACT
GAGTAGTGTGGTGGGGGCTTTTCTTCTGGGGTTTTGTTTACTAAAAGACTTCTTACAAAGAACTGTAGGCCCAAAA
GATCATATGCATGGACATTATTGTAGGGCAGCAGGAGAAAAATGCTATTTTGGTTCTGCTTTCTAGAAATTTTCAAGTG
CTGGGCTACCAAGTCAACTAGCTCCTCTGCATCCTTTAGATGTCTGTGGCTGAGGACAGCTTCATGAGATTGGGTCTC
AGAGCTGCTTTGCACTTTCCCAAGAATAGACCTGTGGACCATGTCTTTTTGTCCACCCAAGTTTTATTATTTTTGGGA
CAGCACCTCTTTTACCAGAGAAAGTAACTCTTGCGGCTAAAATATACCGGAAATAAGAATGAAGAAAAGTAACTGGAT
CAGCTATACTTGGTAAAAATACCTAAAGCTCTGTTTCATGAAAGTGTCTTAAAAATAAAACTAGTCCCTGGCAATGC
AGCAATAGCCAAAACGACTTCTTTGGTTGATTGGTTTTTAATGTTTTTTTTTTTTTCTTTTCTGTTACAGTTTTAA

Fig. 6 (53)

[illegible]

[illegible]

61/375

CAATCTCATTAAACACAAGGTTTGTGTTGGTTTCTTAAAGGCAAGGTAAGGAAGTCCCTATGACATGGACCATGGTGC
GCATGCTCCTCGTGGCTTGTCCCTGGGCCTGGCTCATGAGGTTTCACTCCCACTCAACCCCTGTCTGCATCCCGCTCT
CTCTGCCTTGGTGCTCTGGTCAGTTGACTCACTGTTCTGTCTGTCCACTCTGTTCCCTAGCTGTGGGAGTTATTGGGTA
TTGAAGAGGCTTAATGCCTGCCTCATCTTCTGTGGGTTCTGAACCCATGGGGAAATAAAGACGTGGAAGTCAGAAGAG
GATCAAAATGTCTCTCTGCTAATGGTACCCCTTGTCTGGTGGCGTTTCCCTGGGCTGCCACCATTCCCTCTGTG
CTGAACCTCACCTCTTCAGTCACAAACAAAGCAGCAGCACCTGCCCTGGTGGCTTCAAACAAGGAGGACAGAAAAACATC
TGTGCTGTGAGGCTGGTGGCCAGAGTGGAGGGAGAGTGGAAAAAGGGGAGGAGCAAGGTAAGAAGAGAAAAAAGGC
ATAGAAAGCAGGAGAGAGAGAGGAAGACAGACAGGGTGAGGGAGAGTGGGGTTCAAACAAGCAGAACACAGAGGAGAG
AAGGAGTGGGACAGCAAGAACTGAGAGAGGCTGCCAGCACCATTGGCTGGGTTATGGGTGTGTAATGAAATATTTGAAA
TATTAGTCCATTCTCACACTGCTATAAAGACATACCTGAGACAGGGTATTTTATTAAGAAAAGAGGTTTAAATGGCTCA
TGGTCTGTGGGGCTGTCCAGGCTTCTGCTTCTGGGGAGGCTCAGGAACTTACAATCATAGTGGAAAGCAAGGGGAAG
CAGGCACATCTTCACTTGGATGGAGCAGGAAGAAGAGAGAGAGAAGGGGGAGCTGGTACACACTTTCAACAACCAAGTC
TTCTGAGAAGTCTATCAGAGAACTGCAAGGGGGACATCCCCCCCCATGATGCAATCACATTCCACCAGGCCCTCTCT
CTAACACTGGGGATTACAATTCAACATGAGATTTGGGTGGGGACATAGAGCCAAACCGTATCAGAATTTTCTCAAGGAT
CAATAATTTCCCTCTTCTGGCCCTCACGGAATGAATGAATGCTAGAGCAAAGGAAAGCACTGCTTTCTCAATACCAA
CAGGTGTTGATGGTAATTCCTGTTTCATGCATTAAAGCAAATGTGGCCAGAGGGAGAAAAGGGTCCCCCTAACCCCA
CATCCTGCCAACCTCCCTGCCCCAGAACACAGGTACGATATTTCCAGTGAAACTTAATATCGTGACTGCCAGAATGTT
ACTATTCAGCCATTTTCATGCACAGTGCCCTAGGGGTGCAATGGCATTCTTAGACAACCTGCAATGCCTTTCTAACATTG
TTGCTGAGGAATGTGAAGCCACATCGTTGTTACCTGTAACTGCAGAACACAAGCCTTCTGTCTGCAGGAGGAGGGTAC
GACTTTTCCCTATTTTAAATAAAGAAAACCTTATCGTTGTTATTTTATAAAATGGGTAAGTTTATGAGCATAATGGAGATC
TGTTCTTTGAAAATATTGTCAGCTTGGACAAAACCAAGGAATTGTAGAGCATCAAAAACATTTCAATGAATCACAATAAA
TCTCCTTCTCCATAATGCTTCTTTCATATTTCACTGTCTATAAGATCTGAAAAAGAACGCTCAGTAATGACGTACAGAAT
GTGCTTCTCTGGAGAGGGCAGGGCAGAACAGGACAGGTGAGGCTGGACAGGACAGGCAGCTATTTCACTCCAAGGGG
AAGCAGGGGATCATGTTAGAGTCTGGGGACTTAGCCCTGGTGTATTCCTTCCAAAAGAGTCATAGGAGCACTTGAGCTGTG
TCCTTCTGATGGGCTCAGAAAAATTAATTTAGTATTCAGTGCTTATTTCTCAGATTCAAATAGTACAGAAGACTATAA
TGACAAGCATACTGAGCCAGGGCATCAGGACTCCCACTGGAAGGCCAGAGTAGCCAGGTCCCAGCAGGAGGGAGAAAC
ATGAAATTGAAGTGTGAGATAGGACAGGAGAAATTTAGATTAGTATGACTGGGCAGCTTGTGGAACCTCATATTTCTAT
TAAGGAGTAGGAAAGATGACCTAGTTTGGGCTATTAGGATGAAAAAAGAAAAAGAAATGTTTTCAAGTTTCCAT
TTGGTGTATAATTTTTTTTTTTTTTTTGTATAGGAGTTTCGCTCTTGTGTGTCACGCTGGAGTGCAATGGCGTGATCTCA
GCTCACTGCAACCTCCACCTCCTCCTGGGTTCAAGTGATTCTCCTGCCTCAGTCTCCTGAGTAGCTGGGATTACAGGCA
TGCACCACCATGCCTGGCTAATTTTGTATTTTGTAGAGATGGGGTTTCTACATGTTGGTCAGGCTGGTCTCGAAGCTC
TGACTCCAGGTGATCTGCCACCTCGCCCTCCCAAAGTGCTGAGATTACAGGCATGAGCCACCATGCCTGGCCGTGTG
AGAAATTTTATTGACAAAAAATTTCTTCTGTAAATGCTTTTTATCTCCCAACAACAACAAAAAATTTGGTTCTCCA
AAGAGACTGTGATCCACCCACCGGAAGGCATGTTCCAGGACAGAGTGATCTCAAAGATTAGGATGAGTGGTTGGA
GCTTGGATTAAATTTCTCTCTCTGGTCTGGTGTGACACTCACTTATTTCCCTTTTTCAAAGTTCTAGAATCTGTT
TCATTTAAGAGATTTAAAAACAAGTAAGTATAAAAAAATTCAGATATTCATGCCCTTTTTAATCTCTTGACTTGCCAGG
TAAATCTCCTGGTTGAATTTTCATGTGCATGTTTATTTTCAATTTGCATGAAGTTTAAATCTCCAGGGCTGTACNGCTGC
AACTATTTTTCAGATTCTTCACTGCACAAGTTGGCTGGGCTGCAGGGGTGAGTAAGTGACAAGGCAGCCACACTT
GGCTTGGCCAAGCCATGCAGTGTGATGTGAGTCTGTGCCAGCCAGAGGGAGGATATCTTTTTCTCTTTACACAAAG
GGCTAGTAAGTGGCCTTGATTGCCACTAAGGTTTCATTGACATCATGGCTACCTGAGATGTGCCCTGGTACAGTGCTTCA
TGCACATTGTTATCTGGTAAATGCTTTTGTATGATGGTCTTACATATTTCAATTCAGTGGGAACATTATATGTGTTTT
ACTTAGGGAGAACTTCACCCCAAGTGCCCTTATGCTTGAACAATAGTGGTGTGTTTAGCCTTTGAAGACACTTGGTGTAT
GATCTGACTTCTTCTCTCTGATCTTTGGGGCAGTTATACTTGAGGGTAAATAGGCCCTCAAATTGCTTGGTGTCTTA
CAAATAAAACATAAAGAGCTTAGCTTAGATATAAAAAACCTGAGAAATGGGGAAAAAAGCATGCTATCTGCACAAACAA
GGGGAAAGGCAGTAGGCAGGAACAGGATGGAAGTCCATGGAAGATGCTGTGATTCCCTTCTCTGCTCAGCTCCTCAAGTC
CTGGTTCTTGTGTTTGTGTTGAAGAACAAGCAGAAATAGTGGGATTTGGGATTTAGAGTTCTGGAAATGGCCAGATTTTTTT
TTTTTTTTTTTTTGGAGACAGAGTCTTACTCTGTACCCAGGCTGGAGCATAGGGGCATGATCTTGGCTCACTGCAACCTC
TGCCCTCCTGGGTTAAAGCAATTTCTCTGCTCAGCCTCCCGAGTAGCTGGGATTATAGGCATGTGCCATCATGCACGAA
TAATTTTTGTATTTTGTAGAGATGGGGTTTACCATTGTTGGCCAGGCTGGTCTCTAACTCCTGAACTCAGGTAACCC
ACCCGCTCAGCCTCCCAAAATGCTGAGATTACGGGGGTGAGCCACCACGCTGGCCGAAATGGCCAGATTCTTAGATG
GCTGAACATAGTAAGTCTGTTGTTGATTGTTGTTAATCTGAGGAATACAAAGTTCAAGAAATGTTGTAATCTCAGCGC
CCTTGGTACAAGAGTGCCTGCTCTAAGCCTTTGCTGTTTCAAGGAACTTGATAATTTAGGTGTGATATTTATCTATC
TATTGATTACATCCATCTATTTATCTGTGCTATTTCTTTAGTACAAAAAAGGCTTGTGTCACAGGTTGGGCAGG
TGTGTAAATGAATGATGCAGAGAGAGATTTAAAAACCGTAAGGAGTGGTAGGGACTTGACAAATAGAGTATTTCCCT
ATTTATAGGGAGTGGCCACTGTCAATCTTGGGATTCTTGTCTTGCAGAAAGGCAACATGCAGCTTTAGGGGGGTCCAT
ATCTTCTGACATTTCAAAGGAGCTGGAATCAAGATGTGAATCAGATTATTTAATATTGACAATTAATTCAAATGTT
TGTGCTAACATTGCAAGACTTCTCCTCATGTTGTGTCATGCTGCAAGATGGAGAAAATATGTTGGGCACGTTAGGTATTTA
TGTGTGAGTTTGTGACCTCTGCTCTGGTATATAAGTTTGGCCCTAGAAATATGTTCCGTGATTTATTTTAAAGTTGAGTG
GGAAGCTTCTACTTTTTAATGAGTTTTAAAGGAGAGATGTCATCTACTTATCCCTCTATCATTTGGAGGATAGGCTAG
TTATGTCATTGGATTATACAAATAAACATTTGTTGTGGGTTATTTAAAAAATTTATTTTCTGAAGCGAGTCTATCAA

62/375

GGTTTTTAAATGTGGTCTTCATGGACTTCCAAGGAGGTTTAGGATTGGCAGTGAAAAGAAAGAGAAGAATGGGAAGG
ACACTTACATTTCTGCTTCTTGGGATAGAGGTAATCTGTATATTTTGGTTTTTAAACAGATATTTAATCTTTTAGGCA
CATTAATCTACATTTCTAAGAAGAAATAGGAACTTCTTGATAGAAATGCCACCTGTTTTAACGACTAAGCACCATGG
CACTCTGCCAAGTTGAAAACAAATCTAGGTAAATTTAAATTGGGCTGGCATTTCACAGAAGCTGGTGAAGCATGGTTCA
TAAAGTTTATTTTTTTGCTTGAGAAAAAATGACATTTTACTGATTCTGTGTAAAGAAAACCTTTAAGTTTTTATCAAAG
ACTATTAAGATCAGAATTCAATATTTTATGATAGTATTTAATATTTTACAATGTATTAAATTTACAATTAAGTTAT
TTAATACAAATAACTTAATATTTTACAATAGAGTTGATTATTTTCTAATGCTTTCTTAAAGAAAATCTGTAAAGATCC
ACATAATTGCTAGACCAGTGATAAAGCATGTAATTTCCCCTATCTTCAATTTTTCTTACTGTCTACCCCTCAAAGTAG
TTGACAATGATCTTCTGATAGATCCTGGCTTGGGTAATACATTACACTGGCAGAGTAAGAATTCAAGAAAATAGCTCAAC
AGGATCCCCTCAGTTTGGCTGGTCTTTCTGAAAAGACAAGTGTGAGCAGCCTGAGGAGAACCTGGAACCTCAGGTATTCTC
TGTTTTCAAACCTCAGGAAGGCCTGGGTGAATTCCTGGTAGAGCTGGTAGAACTAGCTTTCTATTATGAATATTGAGAAAT
TTGACCAATTTTATCAGGCTTCTGGAGTGATATTTGCATAGTTACAACCTTAATATCACTTTTCTACTTAACACTCACC
GTAACCTCCACCTACTTGGGCCAGCCCATGTAGTTCAAGGTAAAGATCTTGGATTTTATTCCACATAAGGTAAAGATCT
TGAGCTACAAGATCTTGAACCTACTGAAGCTCTTGAATTACACGGGCTGGCCTCTGCCTTTCTCTCCAACATCATCTCCA
GTGACACTGGCCTTCTTCTCTTCTTCAAATAGACTAAGCTCTTTCTCACTTCAAGCTCTTTGTTGAACCTGCTAGTCC
CTGTTTCTATATGGCTCTTCTCTCCAGATCATTGGCTTCTTTTCAATTTGGGTCTCAAGTCAAATATGACCTTCTTAGAGA
GGTCTCCTCTGGTGATGCCACTTCTCCTATCACAGTATCCCATCACTCTGTTTTATTTTCTTCATAGCCCTTATTTGAA
CTTATCTTACTTATTATTTGCTTCTCATTTAAATGTAAAGCCTGTGAAAGCAGTACCTTCTCTGTTGTACTTTATTGCT
ATATTTTCAAGATCAAGGACAGTATCTGGCATGAAGTGAGTCTCAAAGTATTTGTTAGATGGACGAATTACAATTTG
CCCACATTCAGTGGCTTTACTTGTAACTCTGTTTGTACTCTTGTATGTTATGTAATTTTATTTATATGGAAGGGATGGAAG
AATAGGGTTCGAGGGTAGTGAGGAAATAGTAAAGATGGTACTTGTGGAATTAGCTACATGATTTGAGCAGCAAATTC
AAGTACGGCCTTAAACAGAAAAAGCAAAATATATACTACTTGAAGTCAAGCTGTATGATAATCTAATGGTAGATA
TAGTTATATAAATCATAACACTCAAAGCTTTACCTCTATAATCTGATAAGAATGGGAAGGCTGTATGACATTTTGGCA
GACCATTAAATAAATGTAGTGAACCTCTAGTTTGGCTTTGAGCCTATCTGCATGGCTGATAAATGCTTTTCCAATAGAAA
GAAGGGAACATGCATTCAAGGTGATAAGCAACCGGTGATAAGCACAGCTAGAGACAGTTTTTTAAACCTGAACTCT
GTGGTTACTCATATAATTGTTTATAAGTGGCTCATTTGGGAACCAAGGTAAACAGAATTAATCTTTTAAACATCAAACAG
AAATAAAATAATATTTCTTTTTTTTTTTTTTCTTGGAGATGGAGTCTTGTCTTCCAGGGGGCTGGAGTGACAGTGG
CATGATCTCAGCTCACTGCACTTTCACTTCCCAGGTTCAAGCGATTCTTCTGCCTCAGCCTCTGAGTAGCTGGGACT
ACAAATGCCTGCCGCCATACCTGGCTAATTTTTGTATTTTTTAGTAGAGATGGAGTTTTGCCATGTTGGCCAGGCTGGT
CTCAAACCTCTGACCTTAGGTGATCCACCCACCTCAGTCTCCCAAAGTGTCTGGGATTACAGGCGTGAGCCACTGTGCCT
AGCCAGAAATAAATAATATTTCTTATCTGTACCTAAGACATGTTGGACAGGAGATGTCCCATGAAGCTGATGAAATT
TTAATAATGCAGTAAATATCCATTGAGATTTAATCCTCATCAATCATCATCTTATTGTTACCATGTGGCAGAAAAA
TGTGAAATCTGTTAAATGCTTCTTCTGATGGAAAAATATGAAATCCTTGTAATAAAGCTTGAAATCTCAGGTTCC
CAAAGATGACTCATCTGACCTTCTACTCATCTTTTTAAGACATGAAACAAAAGAAAGCAAATGGGTTTTCTGTGGCCAA
AAGAATTTTCATCAACACCAGTCCATGGGAACAGATCAGACATAGGGAAGGTGGGTCTCATGACACTTTTTGGTTTTATT
CACATCTCTTGAGCAGAGCTCTCAGTATAATCTCCTCAACAAGAATGTGTATTGCATTTCTGTAGGACATAAATTGCCCT
TCTCTCCTCACTATTCCCAGCACTGATTACAAGCTTCAGCAGAAAGCAGAGTTTTAAATCTTGTGGAATTAATAAATA
GATAAGAGTAAAGGTATTTAGGGGGAGACAAGGACATAGCCTGTAATTTAGGTGAGCAAAATCAGTAACCTGTGAGTCTG
GGCTGTGACATGGTCTGGCTCACTATTATTTTTTTTACAAGTTTTTAGGATCTTGGCGTTTTATTGCTTTATCAATTAC
TGTGGACTAAGATGTGCGACTGTGATGTGGATTAAACAACAATTTATTTCTTGTCTCATGCTGTCTGTCCATTGTGG
GTCAGCTGAGTGCTCTGTTCACTTCTGTCTCACTCAGGCATGGGTTGATGGAGCATCCACCATCTCAAACGTTGTTAATTA
CCATGCTTGGGAAGAAAGGAACTCTAAAGGATGTTACCCAGGTGGTTAAATAAGCTCATGTAGGAAATGGAATGTGAC
ACTTCAACTCAAACTCATTTGAACAGAACTCAGTGTGCCTGGCCCCACCAAAACCATCCACAAGGAGGGCAGAAAGTC
TAATTGTGAACAGAACTAATGATATTTACTTAGTATTTGTCTGCTTGATTTTTGGCACAGACTGATTTATTAGAGTGG
GAAGGTAAGCTGATTATCAAAGAATGTCTTATTTCTCATGTAGTTACCATTGATTTATTGAATCATGATTTTCACTCT
TTAATATATTTTGCATCAATGATTGATTAATTTTACAGCTACATCAAGTAACTAATTATTGATTTACTAATCAATTAT
TAAATTCTACAAATTAATAATATTACAACTAAATTTCAATCCTTGAATGTATCCAACATTTATTGGGAACCAAGTCCAT
GGGAACAGATCAGACATAGGGAAGGTGGGTCTCATGTGCTTGATCATCTACTATGTGCTTGATCACTATGCTAGATACT
ACATTGTATGGCTTTGCTGAATATTGTTAAGTCTTCACTCACTTAGCTGAGCTCAGAAATGAATACATCTCAATGCAT
GCAGAGAAGGTTCTTATTGAGGCTTACTCACTTTGTAGGGTGTGGTGGCGTTTTGAGATTGTGTTTTCAAAGTGCTTAG
CACTGGCGATAGTGATGTTTCAATGATGTTGCAAGTTGACTAGGATTTGATAGTTTCAATTTCTTAAATAATTTTTATT
CAACTAATAATTCAGTAACACTGCTCACTTGATGATTAGTCGTGGAGTGAAGACTGCGTTGTGAAGCTCACCATTCA
TTCTCTAACAGTGGTCTCCTGAGTTGGGACACTTACATAGGATTTATTTCTGATGATAACAAGAGCACAGATGCCAAC
ATGCATGTGATAGTTTCTGGGAGAAGACTTGATGATTTAGGCTTACGACTGTCCCTATAAAATGACAAAAGAAGCCACATATA
GCATTAGGTATGGATGAAGGTACTTAAATTTAAGCTTAATTAGGTGTAATCCTTAACCTCTATATTCTACTCTCTGGT
GCTTTGAAGTTGGCCTCTTCCGGTCTCCAGCCACAGAAGGATTTTCTCGCTGACCACAGTTCCCCACGTTTTCCCTTC
AGTAAATAGCAGATGTGTGTGGTGGTAAGCTGGTTTTCTGCCATTGTGTGTGAAAAGGCAGATATTCTGAATGAGGAT
TGTAAGTTATTTTTGTGTTACACATTTCTTTTAGCTTTTTTCAAAGCAATTCATTTTAGTTGAATGTGAAAATTTA
CTCTTGATGATTTTCTCAGATTAATGCTGTATCATGTTAATGGGGTAATGCTTCCCTCTGCAAGATCTTGGAAATTTA
GGGCTTCTGGTCAGTGTTTTACAGCTTTGTCTGAGAAAGATGTAATATGAGTATGTTTTTGGTACATGACTTCAAAAA

Fig. 6. [52]

63/375

GCCAAGTCTGCTTTGCGCTGATTTTTGTGTGAGCAATCCCACCTGTCTGATCTCACCCCTGCTCCCAGGTACAGATAGA
 GGAGACCTTGTGCCCTAGCAACAAATCACATCCACTTTAGCTCTATGGGGACATTTCAACAACAAGGTTCTTGTGNGG
 CTTACCCACTTTGTAGGGTATTGGCGGTGTTTCGAGATTGTGTTTTCAAAGTGCTTAGCACTGGCACAGTGCTGCAACTT
 GCAGCATAATTATGAAATACCTTAACAAAAGGTATTTACAAAAGCAGATGAGAGGATGAATGTGAGGAAGGAGCATGTCTAT
 GTTGGGTAAAGAAAATATGGCACTAGAAACATGGGAGAAGNGTGTGTTTTGTGGGGGTAGATGGATAAGAAAAGAGAACA
 GNTGGATCAGACACCAATTTACCAAATGATTCCATAATATTAGTGACAGATAATGCACAGATAGTGTGCAACAACAGC
 TTTGGGAAAGGCAAACTGACTGTCTATAAAGGTGAGAAGACATTTTATAAGATGTGTTTTACTGAAAGTGTGTCTTG
 TGAAGAGGTTTTGAGCAAAATATTTAAGAAGTCTTTAGGGAACAAGCAATTTTCTTTTGTGTCCTTTCTAAGAATA
 AGACATAAATAGGAAGTTCATCTTTTATTTGTTCTATTCAAATATTTATAGGGGAAAATCGGCTACTACTTCTTTAT
 AAGACCCACCTTTGAAACTCATTATTTTCCAAAGGTGCTTGTCTTATAACAATATTTTCTTCTATGTTTGTGTTATTT
 ATTTATTTTATTGAGATGGGGTCTCACTCTGACACCTAGGCTGGAGTGCAGTGGTGCATCCAGCTCACGTGTAGCCTC
 TACCTCCGGGGCTCAAGTGATCCTCCACCTCAGCTTCTGAGTAGCTGGGATCACAGGCTGTGCCACCATGCCCGGC
 CAATTTTTTGTGTTTTTGGTGGAGATGGGGTTTTGTCTGTTGCCAGGCTGGTCTCGAACTCCTGAACTCTAGCAATC
 AGCCCTCCTTGGCCTCTCAAAGTGCTGGGANTACAGGCGTGAGCCACAGTGCCCTGCCCTATAACAATATAACAATATTC
 TGTTTAGGCTATGGAAGACCACATATATCTTACTTAAGCACTTAGAATGGAAGCCACCTGAAGACAGAGGTTATATCT
 TCACCTTGTCACCCACACATAATAAGTGCCCAATTGATGTCTTTTGATTAATTAATGAATTAATTAGTGAATGAAGA
 CAGACCTAGGACTCCTGATAGAAAAAGAATAAAAACTTGCTTCTGTTTGTCTTCTACAGTGAAAAGATTTCCTAAATA
 TCACATATAATACCAGCACACATATCTTGTGTTGCTAGTGATTTGATTTTCAATTTATGTCTGTTATTTAAATTCAGGGAAA
 AACATAGGTAGTTTTTTCTTGTAATATCTCAACACTGAACTTGAATGAAACCTTATTAATAATGCGCAAAATTAACCTA
 TTATATTTTGTCTGCTAAGGGGCTTTGGCATTGCTTTGGTAAATATGTCTGCTGGTCTGGAAGACTCAGGCCCTGGGA
 TGACAGGCTATGTCAATGGGTGACATGGGTGGGAAAGATGGCTGGCTGTCTGTAAAGTGCTTATGAGTGTGAA
 GCCAAAGGCAGTGCTTGGTACCACCCAGGGAATATCTATCAGAATGAGATATTTTATTGGCTTCACATACCATA
 ACATGTCTGATACAGTCAGCCAAAACAAGATTATTTATCAATGCCTCTGCCAGCTACCCAAGATGGTTAAGAGAACC
 AAGCCAAATGCAGTGATCAAAAAGACTGCTGAAGAAGTAAAGGCCAAAAGGATGAAGAAAAACCAGCCAGGAACCCATG
 TTTTGTCTCTATCTCATTCCTGGGAATCAGCAGTGATGATGAGCATCTATCTATATAATCCGTCTTCTCTGCAGGCAG
 AAGGGCTACTCCCTTACTGCACCTGAGTCTCACATTCTCAACCACATCAGTCACTAGGAAGCGGTCAAGGGAACACCA
 CAGTATAGCAGAGTGGTCAAATCTGCAGGCTCTGTTGCCAGACTGCCTGGGTTCCCTTCTTCTTCTACTTATTAC
 CTTGATAGTTACTAAACCCTCAGTGCCACAGGGTTTTGATCTATAAAATAGAGAAAGTAATAAAATGTTATCTCATAG
 GGTGTAGTGAAGATTAAATGAGATACTGTGTACTTACTATGTATTGTATGGCTTTTGTTAATAAAGGCAGGGTCAGGA
 CAACTGCATATATGTGGTAAGTGGAGATGTGAAATATGTATAACTGGCCACCTAAGTTCAGTATTTGAGGATGTATGAG
 AAACGCTAGTTGAATAAAAACATATTATTATTACTTGTGTTGTTACCATTACTACTGATGTTATTACCAAGCAGATGTT
 AAAAATATTTCTATATGCACTATGGATCCTACTTCACTTATGAGGAGAATAATATAACCCAAAGCTTTTAATTCTCATT
 GCTTCAGTCTTTCAAATGTTTTTGTCTCACTTTACTGAGAGGTAGCAGAAAGCCAAAAGATAGAAATCTAGTAAAAAT
 TCCAAGTAGAAAGACATAAAAGTTTAGTCTTTGAAATGCAGTTGGTCTGGCATAAAAAATAAAATCAGGCTCTAGTCC
 CAGGATAAGATAATTTTTTAATGAGTTGAAATTGTAGCTAATAGAAAGTTGAATATACAGATAAATGAATTGAAAGAAG
 GCATGGCATGGTTTTATTCAACAGATGTTAAAGAGTAAGAGTGATTTTTTTTTTACAAAGACAACCTCAGAAAATAAG
 CCAGAGAGTTTAAAGTGAATTCACCTGCACAGCTTGGTCTGCAATTCATAAATACAATGAAGCTCAAAAATTTATTAG
 TAGCAGAGGCTTATGAGAAGAGCTTGGTCTGTGGAGCAGCAACATGATAAAGTTAGATTTTTGGGGCCTCACCTAACC
 TGTGGGACAGCTCTCGGGCCTCTGATTTCAATTATCCCTGCTTTTTTTTTTTTTTGGTATTGCTGCAACACATCTGTCTC
 CTGGTACCCTCTCCTTCCCTTTCTGTCTGCTTTCCACTGGGATTGAAATGCTTTTCTTCTCCACCTCTGTTTCTAG
 TTGCAGTATTTTTCTTTATCAAGCTCATTTTTTCCCTAACCTGTAAAAACATCACCAGTGAATTTATGACATTGGAGCT
 AGTAGCTGTGTTGATGGACGTGAGTGTCCAGTTCCATAGCTGCATGCCAGATGAATAGCAGTAATAGAGCTACAGAGGC
 CCTGCCAGCACAGCCAGACATGATGCACTAACATGCCAGTTTCTTCTGCTTCTGCTGCTTCCAGCCATGGGGCCCCCTGG
 TGATATATACCGTTAATCAAAACAAGTGTGATGAAAGCTAAATGAAGCAAAATTTAGTGTGTGGCATCAATATCAACATCA
 TTTATTTACTCACTCATTTTTGGTTCACTTGAATATTCAGTACTATTTTTTCCAATAGTAAATGATGAGAAAATAAATTTT
 TAAAGTGGGGGAAAAGAAGGAAAACCTAGTAAATTTCTCAAAAGAAAATAAATAGAAAGAGGTTGAAGCCATGTCAAAT
 GGCTTCAATTCAGACATTTTAAATCATAGGTAGATATTGGTGTAGCCAGAGAAAAACACAGTATTCATAAAAAATTATCA
 TTCAGATGTGAATATGCTGATAGTAATATTACTATCTGGATTTCTCCAGATTCATAAATTTATATAAAAAATAACAACCTGC
 AGCCCAAGGCAGTCTATTTAAATGCGTGAGGAGTAAGGCAAAATGGTATTTCGGAGAAAAAGCATTGACAACCTGGTTAGGT
 AAAATGCTACATTTTCATCTTGATAATAAAATGTTCAAGGTAATATTGGGGCTGTTCAATAAGCAGAGCCAGTGAGAA
 CATAAATCACTCTGTTTTGTGAGTGAACACTGTTAATATTAATGGGAATGTAATGCTGAAGTCTTGGGGATTGA
 TAAAGGGGCAGCTCTAGATNTGTGAGACTGACACGCGGCTCTGGGGGTTCTGACCAGTTAATTATGGACCCCCCTGCAG
 TTTTTTCACTCTCTTGGGAGCATTTCCAGGACCCCTCTGAGGCATTTCTTACTAAATGTGAGAGAGAACTTATTTTC
 AAATTCCTCTGAATTGAGAACCAGACTAGATGTAGGGATAAAGTGAAGTACAGTTGATCTTTGANCAGCACAAGTCTGG
 AATGTGTGGGTCTGCTTATACTTGGATTTTCTTCTGGCTCTGCTACCCCTGAGACAGTAAGACCAACCCCTTCTCTTCT
 TCTTCTCTGAGCCTACTCAATGCAAAGATGATGAGGATGAAGACCTTTTGAATGATATGGTTCCACTTAATATATAG
 TAAATATATTTCTTTCTTATGATTTTCTTAATAACATTTTCTTCTCTAGCTTACTTTATTGTAAGAATACAGTA
 TATAATATATATATAATACAAAATACGTGTTAATTGGCTGTTTATAGTATTGCTCAACAGTAGCCTATTAGTAGTTA
 AGTTTTTTGGGAGTCAAAAGTTTACTCAAAATTTTGTACTACACGTGGGTAAATGCCCCCAACCCCACTTGTTCAG
 GGTCACTGTAGTAGATTAAAAGGTTTTTCATGTCTGGAAGATTCTCTATTCTGGACTGGTTCAAGGAACCTTAGAGG

[illegible]

Fig. 6.59

65/375

GAAAAAAGTGTAGCCAAATCTGAAAATTAAGTTTATTTATATATATTGAATAGTTAGGCCATTTGGCCACACCTGTCTCTG
CATCTGCGTGTGACAAACATCTCTGGGACTGAGCAATAGTTGTGCATCTTAGGTGGGGCCTGCATTTGCTGGCCCCCA
CCATCGACGCATTTCTGATATCTTGTGTTTGGCCTACTTTTCTACTGATGAATGAACTGCTGTAACCTGCTGAATACCTGTAAGCAT
CTAGGCTGTGACCCTTTCTGTGGATGGCTCAGGAGGTAACCAAGTGCATGAGAAGTTTCTGGCCTACCTCAGTTGCTATC
AGGGTGGGCAGAGTATGTGGAGAACTCCTAGCCTGGAGAGATGAGAAAGGATGTAGGTTAAAGTTGAGGTCCTAGAAGA
AAAGATCTTGACAAGGAAAGCCTGAAGGCTTGTCCAGTATGAGGTTGCCAGGAGTGCATCTGTGGGAAGACACGGAAGTG
CACCTAGGAGCAGCTGGTGTCTCAAGACTGACTGATAGGCTCGAACCTGAGCCATGGTTTACAAAGCTGACACAGGAT
GTAACCTATGGGTTGTAGCCAAGTTGTTCCAAACACAGGTGGAGTGAACCTCTGTGGTATTTTGAAGTGATAATTGGCTAG
GGTAATATTTTTCAGGGTGTGGTTCTAACAGATGGTGTCTATTTGAAATCCTTCCCTATAATCTCCATGAATGACTCTGT
AACCTACTTAGGAGGCTTATTCAAGTGGTTCAAACCTAGGCCTGTATTCCAACCTGGTTGGCAATCTGTTTCATTGATGT
TGTTATCTGAATTCATGAAGTGGGCATTACATTGTTTTAAACAAGAAGTATACACAATTGCTTCCCAATCCACTCTCCT
CTCAAAACATGTACTGATACATGCATGTATATTTTTGCCACCCTTAAAAATTCACTTTGTAATTACTTTAATGTTAATG
TAGAAAAGAGACACGAAAACCTCAAAAAGATTTAGGATTTAGGATTTACTTACCTGCTATATAAAAAAATCAGGGTCT
ATCAGCTCTGTTGGAAAGAATGGCTTGAGAAAACCTCTGCTTTTCATCATTGAAACCTTTTATTTTGGGATTGTGTTTATA
AATTTCAGAAAGAGTCTCTTACCTTCTTCCAGCCCAAGTAAGTGATTGGATTGACGTTTGTATTTCATGGACTTTGGCT
TGAATGAAATCTTTAATCTGCCCTTAGATAGTAAATGCCAACAGTTTAAAGTGGCATGATTGCGATCTTTAAATTTGC
CCTACTGATGAATGGTGCAATAGGAAAAGGAAAATAAAAAGTATTTGCTACCTTGAGAAATACACTCAGTCTCTATT
TGATTTTCTTAGATGTGGGGTCTGTAATTGTAAGATCTGTTTTTATTCATCGTAACTAGGAAAGCCTCAACATTTTA
ATTAACAATAGTAATATAAATTACATTAGTTTATTTTTCAGTTAGAAATTTTTTCTTTTCATGTATTTAATACGAAAATAT
CCATGCAAGAGTTCTTTCAGCTTAAGTCAGATGTGTTTCAGTGGCTGGGGCAGTGCATTAACATATAGTCTGCATGTGAGA
AAAACAGCAATTGGCTTTTCACTAGTATTTGTCTATGCTCTATCTTAATGCAATCAACATTTTCTATTGTGCTATGCT
CCACTGTATATCACATTTTACCTATTTGATTCCAAATTTACTTTTGTGGTATTTAGGTTTAAATTTAGTAATTTACATACA
GCTTGGAAAAGTGATTCTTGAAGATATTGCTTTGTATCTACATGATAATTGACACATATTGTATTAATATAAAGCA
TTAACCTCTTTTCTTAGTGGTCCCCAATTTCACTTCTAGCAAAAATAAATTTACAGATTCTGTTTTCTCAAAGAAAATTTG
TATATGGGATTTCTTTCCATTCTTATCTAATGTTAGGATACTGAAGTTAAAGTATGCATTTTCTGTTTTTATATATT
TGTCTTTAAAAATATATGTTTCAAGTATAAAGTAATATCAATTCCTTAAATAATTTTGTAAATATACAGGCAAGCCGCAA
AAAAAGAACAAATATTCTAGAGTTCCATGAAAGTCATCATATTAATAAATGAAATTTTAAAGCAGTTGGACTTCACATTAT
TTCATAAGAATTTTCAACTCTAATGTATATATAATGATTCTACCAAGTGTGTATAGTTCACTTAGCTGTTTCAAATAT
TTTTTCTACTAAGACTAATTAATACTGTGTGGAATACTTTTATATATAGACCATTTCATACTTGAGTTTTTTTTTAAA
ATTTGAGTTCTCAGAGGTAGATTTACTGGTTCAAGAGACATTTTTTAAACTTAATATTAGTTTGCAGGGAGCAATCCAT
AAATCCATGTTTCTCTAATCTCTGCTGGATTTTTTTTTTCTGTGTTTGGAGCATCAGATGAGAAGTTGTGAGGAGAAAC
AATGGAAGAAAGAAAGGAATCATAGAAATCATTGCTGAGTGTGCTCCCCAGGTTCTTGTGTTGCTAACTGAAAGGAATT
TGCTGGCTGAAGGGAAGACATGTTGAAACATTTTATTCACCTATATTACCCCTGAATTTCTCTCCCATGGCCAAGGGA
CAGTATCAAGACTTCTGTTGTTTCACTGAGACAAGTCAAATTAAGAAACACTTGAGTGTATTATGTGTCCTTTGTAGGG
CTTATGGGCATATACCTCAGCAAAGTAGGCGGGCAATAATTTAGGTCATGCCATTTAATTTCAAAGGCCAGCTTTAAT
CTTTTGGGCTGATTGTGATTACTCCAAAACGGCAGAAAACAATGAGAAGGGAATACCAGGTCCAGGTTACAGTTCTA
TGGAGGTTTTGTGTAATCCTGAGTTTTCGCTTTGCAATTTGGCACCATGATGATGCTTTGTATTTTCTTTCTCTGTTCT
ACTTTTTCCCATCATGGCAGGTGAACCTCTCAGTGTGCAAGGAATTATATGTAGCTGACTCTCCAGGGTATGAGAGGT
GGGCTGAAGCTATCGGGATAGCAGCTGGCTTCAGTAGTGTCTTTAGCTGTCTAGACTTTGTGCTTCTCATGATTGTTG
TGTCTGGGCATGTCCTTTACTTTCTAAATCATGTCTGCATTTAAATATTTTGAATATTTTATCAGCATTTTTTGTG
TTTTTCCCCAAAACCTAGTATTTTCAATATTTCTGTGAGAGAACAGGGAGTCTTTCTAGTATATTGCTGGAATAAATA
ATGCAACCTATTCTCTACACAACAGTCAGGGTGATCTTTTAAAGTATACTTTAGATCATGTGCTGCTGCTGCTGCTGCT
CTTCCACAGCTTTTCAATTGCTCTTAGATTAAAAGCAAAACCTTTTATGTTTTCTACAAATGTCTGCATGATCTGGCTCC
TAAGAATCTTCTTTCTTACCCACTCTTTCTCCTGCTCCTTAACTTCCAGCCACACTGGCCCTCTCTGTTTTTTGAACTA
ATGGAGCTCATTCTGCTTGGGGCCTTTGCACTTGACATTCTTTCTGCCCATGTCTGGACACACTGGCTCTTATGCAT
CATTGATTCTCAGCTTAAAGTGCTCTCTCAGAAAGGACCTACCCGTGCCACCTACTGAAAATAGCAAATTTGCTATCA
CCCAATCACTTCAACCCACTACCCCTGTTAATTGTCTGCCTTAAATTTGTTTGTGTTGCTATTTGTTTACATGTTTACA
ATTGAAATATAAGCTCTGTAGGAGCAGGAAACTCTTCTCTTAGTTTCATCACTTCAAGCCCATTACTAAGAACAATGC
ATTGTTTGTGGAATGAATTTAATGATTTAAATAATTAGCCTATATAGTGTGATTTTCAAAGTTGGCAGAAATATCATCATT
GGAATTTGTTCTTAAAGGGAACTGGGTTATAGAAATGTGGGAAGAATACTTAATTAGCATTGAAAACAATGCTTTTAC
TAAGGAATCAAAATCATGAAATGTAAAGAGCAAAATAGGAGTGTATCCCTTTTATTCCAGACTCTATTTTATAGATATA
AAAACCGAGACTCTGGGTTGCTGTGAGTGGCTCAGACCCCAACATTAGTGGCAGAGCTGAGGCCAGGGGATGCACATTC
TGATTCTGCTCATGAGCTGTGCTTAATATCTCACCATGAGTCACTGGCTACTGCCAGTAGATTGGGCACAACCATGA
ATATTAGACTGGCAATTTGCTAGAGATTTTGAACCAACATGGGAAATGGATTGAACAAATTTTCTGTGCTATTTTGTAA
GAGGCAGTAAATAATGGTAATTTGAGTATTAGAGAACAGCATCTGAATACTTTTTCTCAAATTTTACAAGGTGAACATA
GAAAATGTAGCTTTTCTTCTGCTTATTGCTTTCTGAATGTCAACAGATTGCTTTCTTTCAGCTTATGTTAGAACATCA
CCAGCAGGACCCACATCTGACATGCTCTGGACTGTGAGAGCCACTCAGCACTAGGAGAACTTTCCAGTTGAATTTCTCT
TAAGAAGGTGAGTAGGAATAAGATAAAACGAAAACTTATTTCATCATTACCATAATCCTTGTGAAAGTGGAAAAGTTTCAT
CCTGGCAAATTCAAAATCGATTACAACTCATGCATGTTGCATATGATTTTTTAAAGATTTTTTACAAACCCCAATAAAA
TAAGTAGAAGAAAACAGTAGTGATAAATTTAAAGTTCTTAACTGAATGAGTAGCTTTGAATTTTACTCAACGGATATAA

Fig. 6 [60]

66/375

GCTTTGGTTTTTTTTTATAAAAAAGAAAAACAGGTTTGTAAAGAGACTATGAACATATTTTAGAAATGCTTCAGTGATTTT
ATCATTTAAATAGAAATTTGGATTATTCTGGAAAAACAGTTTGATAATATGTTTCAGGCATTTGAACATATTTACTCTCC
TGGCCAGTAATTGCAGTTTTAGAAATTTATCCTATTTTAGGAATCTAGCCTAGAGAAAAATCTGAAATTCAGTCATCT
TGGCATAAGGATGGTTGCAGAAATACTATTAATAATAAAAAAGTTGAATAGTACCTAATATTCAAGTAGAGGTATAAATA
ATTTGTGGCAGGTTTCATTTGCTATAGTTTTATGCAACTATTTAAACAAATATAAGTAAGATTATTAAATGATGAAGGAA
AACTCTTTCAATATAATGTTAATTTTTTTTTTTTTTTTTTTTGGAGAGGGAAGAGCTCTTTTATTTTAGTAATTCCTGACACAT
TTTAGATGCTCATCAATAGTTAATTTCTTTTCATTGCTTCTTACTTTTCTCTCCCTTTATTTTATTTATTTATTTATTT
TATTATTATACTTTACGTTCTAGGGTACATGTGCACAACATGCAGGTTTGTACATATGTATACATGTGCCATGTTGGT
GTGCTGCACCCATTAACCTCGTCATTTACATTAGGTATATCTCCTAATGTTTTCCCTCTCCCCCTTCCCCCACCACGA
CAGGCCCCAGTGTGTGATGTTCCCTTCTCTGTGTCCAAGTGTCTCATTGTTCAATTCACCATATGAGTGAGAATATG
TGGTGTTTGGTTTTTTGTTCTTGCATAGTTTGTCTGAGAATGATGGTTTCCAGCTTCATCCATGTCCCTAGAAAGGACA
TGAACCTCACCTTTTTTATAATATAATGTTAATTTTTTAGAGAGTAAGACCTAAACTATATATACGTGTATGTAATAC
GTATATAGTATAATCTCAACTACATAAAAAAAGACAAAAAATTAAAGATTGCAAAAAAAGTCAAAGTATTAATAAATA
TTATCTCTAGGATTTGAATAATTATGCTATTTTCTCCTTTATACTCTTCGTATTTTCACTTTTTCCACAATATGTCTA
TTATTTTAAATAATCAGAAAAATCAATATAATTTATTTTAAATCTTGGCAGATGAACATAGTGAATGAACATATGTCAAAT
GCGGTTGGAATTTTGTGAACTTCTTTACAGAAGACTATATAGATGAGTGTTTTTCTAAAAAATCTTTGGATAGATAAT
AAGATCAATTAAAAATTGAGTAAATTCATCTGTTTGGTGTGTGTGTGTTTAACTATTTATCTCTTGTGTGCTACTTAGCT
CCTGTATTGCTTTTCGTAATAAGACTGAGGTAGTTGGTGAAATTTGAACAATCTTGCATAAAGATTTTATTGCATAGG
TTATAGGATAAAATGCAAGAGAAATGTTTGTGGAAAGAGTACTTAGTAGAGAAATCAGAAAGGCTTTATGGGTCTTTCA
TTTTGGTCACTGTTATACCTTTGTCTAATAGACCAATGATATAAATCTTACTCTATAAGAGATTGATACCTAGTTAAG
GAAGGTCAATGATATATTCATCTTGTACAGGAAATTTAAGTGGCCAGAAAAAATCAAGAACCACAACTAACGAA
TAGAGAGCTCTATTGTTATTGACTGAAGTATAAACTTAGATCCCTTAGCAAGCGAACTCACAGTCCATACAAAACCC
CTTGCTATGTCCGTTGGAGAAGGATTGGCAGCAAGATAGCAAGTATGTGGAGGATCATTGTTTCATGAAGCAGGGGTAGA
TAGGAGCCTTTTATATACCTTCTAACCTTTTTTATTGTCTAACCTATTGTTATGTTGTCTCATTAGAAGAGGCAATAT
AATGTAGTGGCCAAGAGGTATGACTTAAGAATCACTGGACTCAAAATTTGCCAGTTTATAACTCTGTAATCCTGGACAA
ACTACTCCCAATTTTCTAATTTGGAAATGTGGATGATAATGGTCCAAAAAAGATGAGTCATCTTAAGTAT
TTGAACCAGAGAGAATTTAATTGGCTATGCAGCTGAGGGAAGAGCTGAAAAGCCAAATGGGGTCAATTAACCAACCCGAA
TATTAGCAATAGCAGGAAGCATCCACTAATTCTAATTTGAAGGGAACAATATGTTGGAGACAGTGTATTGCGTCCACAG
ACTGAGGTCACTGGAATTATGGTGTAACTGGAGGAGGATGGGAGAAAGCTTTTTGATGGTAGAGATTCTGCTCAAGGC
ACNGAGAGAGGAGAGAAATATCTTGGTGTCTCCATCTTTTCGACCCTCCAGTCTTGTAGCCAAACACAGCCAGAAGTCAA
CTGACAAGGGACTCTGCATTGCCTCTCTTTAATACAGAGCAGAGAAGGAGAAAGGTGAAGAATGGATGTGTGACAGGCA
ACAATTCCTACCTCAGAGGTATTATGCCTAAAGCATTTAGAACAGTGCCTGGAAGATATGTGCTTAATAGACACTACCA
TTATCATCGTCATCATCATCATCTGTTTATCATCATTTGGTGGCATTGTCAGAGTAGCAACATCTCTTTGTGAATGTAC
TTTACAGGTTGGATGCTATGAGATTGTTTCTAATTACAGCCCTTTTCCGGGCCCTGCTGTGGTCAAGGTTGCTAGTCATT
TCAGCATTTTATGTTTGGTGTAGGCGGGGTGTTCCACCTTCCATTCTCATCTACCCTGCGTTGATTACATTTAGAGT
CAGCAGACCTAGTTCATTGATGACAAGAAGTACGACCAAGCAATGTTCTAAAGAATCCAGGCAGTTTTAGGAGCATGATA
AAAATTCACAACCTGTGGGAAATGACCCCTTGGAAAGTTAACTTTAAATTAATGATTTTAAATTTAGGATTTCTTTACA
TATCCTAGTCCCTTTAGAGTTGAGCTTAGCTTTGTCTGCAAAACTGAAAGAATACATATTTAATTTTTTTGGTATTTT
CTGTAGCATGGCATTAAATTAATAAATTTAAAGGAATAGAAAGCTTGCAAGATGCCCTAATAGGCCACCAGGAATAA
TCACATAGTTGCCATTTTGAAGCATAGACATAAAATTAATAAATTTCCATCCAGATAAGTCACGAGGCTTTGCCAAAGT
GCCCTCTTAAATGCTCCCTTTTGAAGATGCATATTTATTTGATGATTTTGTGCTGAGCCCTTGGGAATTTCTCTCTG
AGAGACTTTTACCAGTATGAAAAATAGCAGCTTTTCTAAGTTTTGGAATATTTGTCAGTCTTTTTTTTTCATTGGTTTT
CCGATTATCCTATTCTCAGAAATAACATTTATTGATCTCAAGGAGTTAAACATTGTCTTGTCTCTGTTCTGTATT
CTTCACCTTTAAGACCAGATCCCAACTAAGTAATAATAAAAGATAATAATGGCTAAGAGTTTTTGGAGCTTTCTCCACG
TCAGTTATTGTTCCAGCACTTTGGTTTCACTCTCTCATTTGATGTGATATAGGAACCTGTAACAACCTATGAGACAG
GTGCTTCACTTTAAAGACTAAGATACTGACGAGAGGTTATAAACCTCCCCACGGTCAAAAATCATGCTGTGAGT
GAGCTCGACCTTCCACTACTATTAATACATGGTAATGTTGACATCTTATTGTAAATGTTAAACAATAAAGCGTAAAGG
GAAAGAAGTAAATGCAAAAAAATGGTCAAAGCAGGAGATGATTTTAAAGAGCATCTGGTTCACTCTCCCTTTTACAGC
TGAGAAAACCAATCTCTAGAAAAAAGAAATGAGCCTTTTGAATTATAAAGCAGACTGCCTAACAAGTATCAAGTCATCTC
ACTTATTCTCTCTGCTCTTCCATGATCACAGAGTTCTGACCATGTCCTGTGTCACTCTCAAGCAGAGATTGAAAATGAC
ATTCGTCCTTTACTTGTTCGAAGGAAGCAACATTTTATAGTTTGAAGTGTCTCTCTGCTGCTTTGCAAGAGGT
TTGCAGAAGTTAAGCCTCATGGAGTCTTCTCTCTTAACTTAAAGTGAAGTGGATTGCTTATTGCTCTTCTTTGCTGTAA
ATTCTATACATTTTCAATCTGGTGCATAGTTCTGAGTTTTGTACATCCTTATGTGGCTCTACACTCTTTGAGGTTAATT
TTGGCCTTGGATGGTGCCCTTTTAAAGGCAGGTGTAAGCAACACAGTGTTTTGTGCTTGGGAAACGCTCTGTGTATGGG
CTTCTCTCTTGGTTTTAAGTATTAACAAGGTAGTAAAGTATGAAAGGTGCTGTGTTTGGAGTCTTTAAATGGACTTGGC
ATTTGGCTTGTCTACAATCTTTCAAGGAATTTTAACTTCTGATATTCAGATTGAGTCACACACCTGGGGAGTGGTGACCA
TAGCTCTCTTACCCCTCCAGCTCCACTTCTGGGTTAGCATGAACGACCTGTAACCTGCTCTCAGGCTCTACACA
AAGGTGCTTCAGAAATGCTGCTGTGGCCACTTCTGTGAAAGGGCATGCTCAGTCAACCTGCTCTCAGGCTCTACACA
AGAGCAGCAGGAGGAGCCAGGATAGAGAGAGGAGGCTGGATGCTGCTGGCTCTGTGCCATGCTTGGGTAGGC

67/375

CACTTGACTACTTTAAACCAAGTTGACTCTCCTGTAATGCAATAGGGGTTTAAATGATCTCTGTGGCTCTAGAGTTTTGT
AGTTTTCTACTGTTCTTTGAAGCATGAACATTAATTCAACAGAAGAAAAAACCACATTTTTCATTGAGAACAGTT
TCAAGATATTGCTCTGACTCACTGGATGGCAAATCATAGTGAAAGGGAAGTCTGACTCGACTTCCATTTTGCATTACTT
TTGGCCAGCATGGCTCTTTATGGTGTACTTGTGTATAATAAAACAGCTNTCTAGAGAATACTCTTACATTTACTTACT
GAGAGATAACAGAAGTCCGAATAAAAACATAGAAATGGAAGACTNGGAAATTATTTTTTCTTTTCTATTACAT
ACAGAGGAACAAAGGCTGATATTTGTGTTTATGCCCCCTTCTGAGGACAATGTCTTGAAAATCCATATTATTATT
TGTCTTTATATGTAATTGGATTGTTTAAACTCTTCTGAACTTTGTAGCTTTTTCATTATATCTCTTTTGTCTGGAATA
TTAATAAAAACCTCCACTTAAATAGCCACTTTATTCTGTAAATTTTATTTAAGGCCTGAACTTGGCCGCAAATGAGAGTAC
TTGTGGTTTTTTTTTTTTTTTTTTTTTAAATGATGTGACTGCTTTGTGAAGGGACATAATGAGTCTGTGTTCTCTTCTATT
CCTCTTCAACAACCTTTGTGTCAGGAAAGAAGGCTATTATGATTTCTTGGAGATGTGGGAGGATTGTGGCATCACCATGTCC
TAGTCATGGATGAAAGNAGAACTATTATACCAGGGTAACATCTGAGGCCTGAGATAAAATCCCATTAACAATCTCTTT
AAATATTTCTGTGTTTAAATGGGATGAGAAGACTATCCACTCCACAAANGTAATCCCTTTTCTCTCAGCCTAGTGAA
ACTTATTGTTTCTTTTCCCTAGATAAAAAAATAAGGATGCTGTACAGNTTCTTTTGGCTTGTAAAAGACAGA
TAATTCACAGATTTTGTCTTTCTGTAGCTTATGCAATGCTGAAAAGGCGCTGTAAGCAGGGATTCCCTGAACATNGCG
CCGTGGGCCCCGATCCCTGTTTCTTTCAGAGAGCTCACTGGCAGCCTCCCTGATGCTTTGTGCCAGTTTTTAGG
CGCTCAAAGCCACATGCACATTGACATAATCTCCGGTGGTTTTGGCTGGTTTATAATCTGGCTTATTGAGGTTTGGTT
CAAGGCAGAGGCTTTAGGGCAGGGATCTTCTGTGAGCTGAAATAAAGGGTCTGGTTTGGAGGAGATTTGACTCTGCC
AAATAAAGCGGCACATTTCCAACCTGCACATGCTGAGTTCGCTCGAACACATCCATGCAGAACACAGACATGCATTAG
GCAGCTAGTTTGTGGAAGGCAGTGTGCTGAGCACAAGGGGGAATAGAAAGACACATGGCTGCCGTGAAATAACTGCTTC
CAGAAAGCACATGTCGAGTTGGAAGGATGAGCCAGAAGACACACAGAGAATATTACTCAGCCTAAAATGTGACGTCCTC
AAAGCGTGCTAGTATGAGACCCACAGAGTTGGAGAAGAGATTTTCTTTCCAGTGGGGAAAATCCAGGTTAGAAAAGACCA
GACAGGCCATATTACCGGAGGCACCTTTATTTCAAGTTTGGCTTTTGTGGTTTTCGGTTACCTGCAGTCAACCGTGTC
CNAAAATATTGAGTGAACATTTAAGAGATACACAATTCGTAAGTTTAAATTTGCATTCTGTCTGAGTAGTGTGATGA
AATTTTCATGCCATCCTGCCTGGGGTGTGTAGCATCCCTTTGTCCAGCATGTCCATGCTGTCCATGTGACTCGCCTGGAG
GTCCCTTAGTAGCCGTCTCATTAGCAGATCCACCTTCGAGGTATGGAAGTGCTTGTGTTCAAGGAACCTTAGTTTACT
TAATAATGGCCCAAAGTGAGGAGTGGGGATGCTGGCAATTTGAATATCCCTAAAGTGCTTCTTTAAGCTAAAAGGTG
AAAGTTTGAACCTAATAAGGAAAAAACAATAATATATGCTGAGGTTGCCAAGGTTTATGCTAAAATGAATCTTCTA
TCCATGAAGATGTGAAGAGGGAAAAAGAAATTCATGCCAGTTTTGCTGTTGCACCTTGATCTGCAAAGGTTATGGCCAC
AGTGTGCAATAAGTGCTTAGCTAAGATAAAAAAGGCATTGAATTTGTGGGCGGAAGACATAAACAGAAATGTGTTCTGA
TTGACCGCAATTAGGTTTGGTACTATCAGTGCAGTTTCAGGCCTACACTGGGGGTCTGGAACATATGCCCTGCAGATA
ATGGGGGACTGTGCTATAGAGCCCTGGATACTAATGGTGTCTAGGGATTACAGGCCCTCTCCTATTTTGGGAAGGGGCA
ACCTCAGCATATAATTTTGTCTTCTTATTAGGTTCAAACCTTCACCTTTTAGCTTAAAGGAAGCACTTTAGGGAT
ATTCAAATTCAGCAGCATCCCCACTCTGCACTTTGGGCCATTATTAAGTAAACTAAGAGTTCTTGAACACAAGCACTT
CCATACCTCGAAGGTGGATCTGCCAAAGAGACGGCTACTAAGGGACCTCCGGGCGAGTCACATGGACATGTGCTGTGTA
TGGAACCTTGGAAGAGGCTGTCTTACCTCCCTGTGCACTTCTGGCAGCCCTGGCACTGCTCATAGATAGCCATGTGA
CTCAGGCTGGGACTCTGACTCTAGAGCGAATGGGTTAAAGGTCAAGAGGCTGTTAGAACTTATTGTTGGTGTGAGTGGT
GGCGCCCATTTGGCTTTTCACTGGCGGCGGCAGCAGTGTCTGGCTGTAATTTCTGCTACAGGATAGTGGTGTGATT
CTTGCTCCTTGGCATCTTGCGCGCTGGGTTTTTGTCTCATTTTCTGTCTTCTAGTGATGAAGACTTCTACTGAGTCTGAA
CCTGCATGTCTTCCAATGGAGTCTACTTTTTTCTCTCCAGCTAGCCAAGGCGGTTTCTGTTATGGCAAGCAAGAAT
TCCCACAGCACCTGAGTGTCAACGGCTTTCATCGTTTGTGCTGACCCACCTGTGCAGCTGATCGTCTGCTTTTCTC
CGGCTACTCACCTTCTTTATCTACCTATATAACTCCCTGCTTTGAAGGCTGAACTCCAGCATTTTTAACTTTTCTGA
GTTATTGAAGAGACTTTACTGTTTACTATTCTCTGTACAGTACAACATCTTATAATTGCCATTATACAGATTTTTT
TACATTGTATGTCTTTTTTTTTTATTATTATTTGTTTCTGTTTGCCTACTAGCCCATGAGGAATGTTTTTGGTAGGAAC
TCTATTTTCTCTTTTATAGTTCCAGATCCAGCTAAGATTACACTCTGGTTGCGTGACTGAACAAATCTGTTTGCAGGGA
GAGATGTGGTGTGGAATTTGTAACCTATGGAGAATGAAAAAATAGAATAGCTGTTGTGAGGCATTTACTCTGGTGAT
ACTAAGGGAGGAATAAATGGTGTCTGAAATGTGTGAGGGCCGTCTGATACCGAGTAGTGTACATTTATTTTCCACTTA
AAAAAGTCTGGTTTTATTTAGGTATTATTTATTTACAGTAAAATCCATCCCTTTTATTGTAGAGTTCTATAAGTTTTGAC
AGATGCATATAGTCATGTGTATACCACCAAGAAATTAATGTATAGAACAGTTTGATCACCTCCCTCAAAGCTCTCCCTC
CTTCTTATAGCCAGTGTCTCCCCACATCTTCAGCTCCTGGAAACAACTGATCTATGAATTGATATGTGTGTTGTGTGT
GTGTGTGTGTATATATATATATATATATATATATATATATAGTTTGTGTTTGTGTTTTTGTAGACAAAGTC
TCTCTCTGTTGCCAGGCTTGAGTGCAGCAGCAATCTCAGCTTACTACAACCTCTACCCCCGGGTTCAAGTGATTC
TCCTGCCTCAGCCTCCCAAGTAGCTACGATTATAGGTGCTGCCACCATGCCAGCTAAATTTTTTTTTTTTTTTTGTG
TATTTTCAGTAGAGACAGGGTTACCATGTGTCAGGCTGCTCAAACTCCTGACCTCAGGTGATCCACCGGCTTG
GCATCCCAAAGTGTGAGATTACAAGCATAAGCCACCACATCCAGCCTATCAATTTATATTTAAGCAGTTATCATAGT
TCTACAACCTTCCAGAATAATGTTTTATACACCAGGAAGATAAAAATAATTGGATAGTGGATTTTTGTCTAGGAATAGAG
TTGCTGAAATTAGGAATTAATAACATGTATTTATACTAAAAATAATCCATTACTTATATAAAATTCAGTGTAATTG
GGCATCCTGTATTTTATCTGGCAACCCCAACCCCACTGGATGGGTATTGCCAGTGTGGGAAGTGTAGAAATTGAG
GGTAAGTGTGAAATTGGCAGACAGAGAAGGAACTGCAAGAAGAGANCATGGATCCTATCAACAGAATCATTACGCCAT
TCAGACACTTTGTGACAACCTAAAAGAGAGGAGGAGTGAGATTTTTGTATGAAGTAAGAATTCATTGTTTGTACAT
GAACAGCATATGCTAGCCTGCTTTGAAGACTGAAGTTCTTGGCTTTCCAGTTTATAAACCAGTTCTATCTGGGAGCTT

CGAGCCAAATTGCTGTTGTGGAGGAATGGGACTCAGGAAGCACGGGCACCCTGAAATAGGTGGATGTGGTCTGTGGAAAA
GGTGGGAAGCACACTAGGGCTTCTACCCCTTAAGAAAATGAACCTTTGCTGAGTTATCAAAGTGAGTACTTGGCTATTTCT
CAGGATAGCCATGCCACAAACCATATTTACAGTAAAATTCAAGTTGGTAACAATTAAAATGACTGACCTCTAGTTTAT
CTATATATTATTGGAACAAAAGGGCTTACTGAGCAATGCCAAGGAAAGAACTTCCAAGTGGGTTCTTCTTACTCTACA
TAAAGAATAAACTATTTTTAAAGAGCTTTTGGCAAGTCCACTGTTTATACTACCATAAGTCTTACCTTTCTGTTTTAAA
GCAAGCTTGGCAGGACAGTTACTTGGAAATAAGTTGTCTAGTGTGGTGGAGTGGTAGCAGTTGTGTCTGGAATTCTT
CATTCTTTTCTCGCTCTCCAATAACCTACCCTGTGAGGCTGTCTCCAACCCAGAGCCCTGACCAAGTGACCATGCTG
CTAAGCTGCTTGATAATAGTTTAAATATCAGTAAAGGGACACAAGTTTAAATTTATTTGACATATTAGTGCTATCAGTTA
ATGACTTAAAAATAGCATCTTTGGTTTCTAGGTGTTGACAAAGATTCTCTAACCTTACCAAACCTTTAGCCATGCTCCTCT
GAACCCCTTCTTGACTAGGCCTTAACCTCTATCACAACTACAGATTCTCAACACCAATGATTTTCATCCACTCGTGCC
CCACATTAAGAGACTTACACAAACACTAGATAAATTTCTAACAGCTCAAGGCCACATCCCTAGGACTACCCCTACCCAC
TTAGGATGCTGCTGAGGAAGCTCAAGGTTGCCAGGAGAGTTTACTATTTCTCTAGCCAAACCCCTGGAGCTAGGCC
CAACCCCTTCTTAGAGCATTACTAAAAAGGGCTTACAATTGTGAATCTTGGCCCTGTAACCTTTGATAAATATAT
GCACCTTCTACTGCTCAAGAGTGTCTTTCTCAAGGACCCAAAGAGCCATTCTTCTAAAAAGTAACCATCAGGAGAGAGAG
GGCCTCTGTCTTTTGGTATCTGGGCAGATAGAATCCTAACTCCCATAATTGTCTAATCAACTTTAATGTTGACCAACCC
TTTGTAATTTTCTACTCTCTGACTTCACTGAGCCTGCTCTCACCCCTTCCCTTTTCTACTCTCTCATTCTCTCTGAA
ATACACAGTCTCCTCTGTGCAATCAAGGTTGAGTTCAGTTCACACTGCCTCTTCCCTATTGCAATAGCGTATTAG
TGGTTCAAATCTGTCTCCCTCACTTTAACTAGTGTCTGGCTTCTCTTATCTCTGACAGTGTGAAGAATTTGGAAATTGC
AAGGAGCATGGGAAGGAGATGATTTGGGGTAGGCATCTTTTATTTTTTAAATCACATTGCATACAGGTGGCTGTCTCTT
CTGCTCATACTCCTAGAACAGGCCTTTGGTGTATTTTGGCTATATATAGGAGACTGGGACTAGAAGGTCACCCCTGTTTCAG
CTGTTTTGAGACTATCATTAGGTTGTAAATGGAATCCATTAAAAAATTATATGGAATGCACAAAATAAAGCAGGTGAAG
GCAAAATTACTCTTATGGAACAGGGGTAGGAAATCTAGAATCGTATTTATTCTCTTCTCTTTTATACTTATTTGG
GGAGTCTTATGCTCATTAAAGAACAACTGGGAGGGTAAACACAAGTTTACAAGAAAACCTAGTTTCTCTCTCTTTCAGAGT
TCTTTCCATCCTGGCAGCTGAATTGGACTCAGCAGCTCTCGGGGGCAGTGGCTTGAGTGTGCTGGGCTTGTGTCTCCTAA
ATAGGAAATACTACCCACAATGGGATAAAGGACCCACAGGGACTCTATAACTGGGGANTTAGAGGACACATCTGTGTGA
ATTCTGGCAGAAGGGCTAGGCATGAAGTCAGAGCAGGAGATGACTCAGAAATCCTGATGCTTAGAGACATTACCTGTG
GCTACTGGGATCACTGCGATGAACCTTTGCTGAGGTCTGTAATGTGATTTACAATAATTATTCTATTCCCTTACTCACT
AGCTTGACAAGATGAACAAGTTAATGTTATTAGCTTCTCAAATTGGAAGATGATAATTATTAGGTGGGTCCATTGGGGAG
TCAGGCTGGGGTGAGTTGTTATCAAATCAGAAGGAGTTATCAGTAGGGCACTAGTAATCAATAATGATTGAATGTGGGC
TACCAGAATTTGCCCTTTTCATGATGTATACAGGACTTGTGTTACATAACCCANGTCTTCAAGAAGATAAAATTAGGAAGAC
ATCCAGATAACAGAAATGTGGAGAGACCTTGATATCATATTATGATTGAGAAAGAAAAACATAGACATTGACATTG
GGAAGGAATGACTACATCCAGTTATGGCAGCAAAGCTGTGTGTTGATTGATATTGTGAGAAATGAATCAGTGATTGGGCA
CTGTGGCTAGGACAGAAAGGGTGACCCCTGAGAGCCACAGTGCTTTTGTGTGTGACAGCCATGAAGAAAGCTTATCTGGA
CTTGATATTGACCCGTTGTGTATTTCCGTATTTTTCTCTCTTTCTCTCTCTTCTCTCTCTCTCTCTCTCTCTCTCT
TCAACCTCATGTTGAAAAAAACCTGAAGTTTGCTTGTGGAATGGGTGAATTTGTGAGTTATGATGAATTGGAATTA
TTTGCAATCAAATGGAAAGTTGTAAACAGGTGTGGATGGATGCAGCTCACACATAATGCATGTGGTGAATTGAGGAA
GCTGGTAGAAGTTTGGGGCGTGATTGACAGGTTTAAATGTAGCAGAAATAGAGTAGTTGCTTTTGGCATTTTAGATTTT
TAAATAAATACTTTGNTCAGGCCACACATTAGTTAGTCAGACACAGAGTTGGAACCATATTTGGAACCTTCGGAGCCTCC
ACGTGGGCTTGTTCATCGTCTTATGTTAGGGTGACAAGGTTTCGGAGCTAAAACAGAGAGAGAAAGCCACAGCAGAAG
CCTCTCCAGACCCACTGTGTCTGATTTTGAACCTGAGGCATTTTCTGTCCACAGCCATATGCAGTGTGAACAGGCCACAG
ATGTACATCAAGTGAGTGGGTGAAATAACGTTTGGTGGGAAATGATGACAGTTTATGGCATTAGTCCTTGAAGCCCCA
GGTGCATTATTATCATCTTAAATATATTTTAAAGCTGTTAGCCTTGGGGATATTTAGCCTGTTTGCANCTGTATTTTAAA
GATGAGCCCTGGAGTGAATCAGTGAGGGGAGCGAGTCATACCTGAACTAGGAGAAGAGATGAATGAATCTTTGTAGGAG
AAGAGTTAAGTGGATCTAGTTATCCCTGAACAAGGAGAATATATCAGGGTAATGAAGAGACCTAGAGGAAGGTCTATCGT
TTCTTTTAAACAGCCAGCTGGTTGACCTTCTGACCTGCTTAGAGCCAACCTTGGCCTGGGCAGCTTGACCAAGC
TTTGCAATGCCCCCTTGATGTGAGGATGCTATACCTGGATTATCTTGGCACAGAGCATGAATTATAATTCCTGATCTC
AGCATATTCTACCCCTTGACTTCTNTGTTAGGGATTTTGACTCTTCTGCTTCTGACTTTTCGATGAATCATGTCTCCTT
GACAGAGAGAAGGCTCTTTTTTTTTTAAATGACTCATAGCCATATCTATATAAACCCTGAGTGATAAATAACTCATAG
CCATAGCTACATATGGCCACTGAATTGAGTGATTAATAATTCTGTTGTTTGAATACTGTTGATTTTTTTCTGTAATTTTAT
TATGTGGTTGTGGCTATAAAGATAGCTAATAATCTTTATTAGAATTTGGATACTGTTGATTTTTTTCTGTAATTTTAT
AACTTCCATTTCCCTGTGGTACATATGCAGTGTGGAATACTATGCAGACATAAAAAACAATAAAATCATGTCCTTTGTAG
CAGCATGGATGCAGCTGGAACCCATTATCATAAATGAATTAATGTGAAAAACAGAAAACCAATNTCCCATCTTTTAC
TTATTAGTGGTAGCTGCTTATAAGTAACTGGACACACACAGACATAAAGATGGAAACAATAGATACTGGGACTCCGAA
AACAGAGAGGGAGGGGGGCAAGGGCTAAACAACTTCTNTTGGATACTATGTTCACTATCTGGACACAGGATCAATAG
AAGCCCAAACCTTAGCATCATGCAGTGTATCCCTGTAAACAAACCTGCATATGTACTCGCTGAATCTAAACCTTTAAATTT
AAATTTNNAAAAAAAATTCATGTTTGGACTTAGGCTTAAATTTCTAGAATTTTTTCCACCTCTAAGTTGTCAATTATACA
AAGTATGTTTTAATAGTAGCTGGAAGAGTTATTTAAATCCACACACTAACAGCAACCACAGTGAATACGGTTTAGGTAAT
ATTTTCTTTTATCCAACAGCTAGAGTGAGATGCACAGAACAATGAACAAGCACCTCAAGACCTTGGACTTGTTAGAGAT
TCAGAGTGAGTTTCAAAGCAAGAAAAGGCAGGAACATGAGTAGCATTCTATAAAATAGCTACTGAAGCAGAGTAGCTA
AGGAAAGATGATTGTTGTAGAAACACAATCAGTGAAATAGTCTGGTAGAAAGACTATTCTCTTAAATTTCTTATACTCCC

Fig. 6.637

69/375

ATAGAATTTACTTCTAAACCATACTGCCCTTAGACTTGAGCAANAATATTCCCTGCCAGCCNGCATTTCAGAGGATC
CTAATTAAACCCCTCCTCTTGCCCTTCCCTTCCCCACAGGGTGAGCATTCTGTAGTCCAAGTAATCATATCCCCTAACCC
CTCCCATGTAAGCCATGGTCTGGGTATCTGGACTCTAGAAATTTCCCTGCCAGGGTAGTCCAAAACCAAGACACAGGTCTA
TCCTTCAGGGGGAAGTTTGCNTTCCACACAAAAGGGAGGCCAAGGGGCAGGGAATGTGAATGAATGAGAAACCATGGCGT
CCATACATAAGTTTGCAAATCTCAGTGAAAAGAATAAGTTGGCATGAAGAGAAGGAGGGGTAGGAGAGAGCCCTGGGGGCC
AGCTTCTTCTGAATAAGTAAATTTCTGGTGCAGGGCTTTTCTTAGGTGCGTTGCATATGTTACCTCATTAACTCTGCAG
AACACTTCAGGGTAGTGTCTACTGTACATTATGGGACAGGGAAATGAGGCTCAGGGGAGTTAAGTAACAGACCCAAG
GCAACTGACTTGGTAAGAAGTTGAGCTGAGATTAAACCTTAGGTGATTGAGCTCTAAAGTGCAATGTTATTTTCTACCTT
GTTATGCTGCCTGTGATCAGTATCTTTGCTTTTATAATTTCCAGTTCTTTCCAGAACCTAGCCTGGTCTTGCACCTTG
GTGACATGCAATAAATATTTGCTGAGTAACTAACAAAACAGACCATTATTACCTTTACTAGTTATTTTATTATTATG
TATTTATTACCTTTACTATTAATGGTATATACAATAACAAGTGGTGTAGGTGAGGAATTCATGTCAAATATACTGA
AAGGGACAGTTCACTCCTGATCCATCTGTACTGGATGGATGTGTTGATCTCCCTGTGGCCATGTAGCTTTTGGGCTTAT
CTCTCCATTTGTGCTAGTTTAGTAAATGCTGCAATGTTCTGGCTAGCAAGGACTCAAATGTCCCAGAACAACTTTTGC
TCAAAGAAAATATTAATAAACACCATATATGCTTCTGTAGTCCAAAATGTTTCTTTCTTACTTAAAAATGGCACAA
ACTCTGAGTATTAAGGTGATTCAAGAAGTTGTGAGAATGCCTGTTTCTCAGGAGTTGATTGGCAGGGTCCCTCTGTTGG
TGCGGCCCTGCTTGTCTGGGCTGTAGTTCTTCCATGTGTGTGGGCCACCCATGCTGGCTCCTGGANTGGTCAGTGTGCT
GTCCTGGGGCTTGGTCTTTCCCTCCGCTCACCCCCACTTATCATGGATGCCAAGACCATTCTCTGCTGTTGGCAGAAAG
CCATGGAACATACTTCCCTAATTCCTGCTATAGGCTCATTTGGTATTTTCCCCATGTGCTCCCATTTGTACACTTAATT
GTTTGGGCTTATTTGCTGTCTTCTTCTGCTAACTGTAGGCTCATTTGCGCACAGGCTTTGTGTCTCTCTTGTTTACCA
TTATATCATCATCTAACACAACTGCTGATAGTAACTTACTTAATGAATTTTACAGAATGACAATGGACTGCCATC
ATAATTGAGTCATTAACACTTTTTTCAAAAAGTTCTAGCATTAAGGTATCAGATCAAAGTTTCTTTTCAAAAAATCT
TACATTTTCTCTATACTGTAATTGTATCTACCTGCTTGGAGACTCACCAAGAGTGTAGTCACTGTGTACCTCCCAGA
GTGACTTTTTTTTATCTCATTTAGAATTTTGTACTGTGATTCTCTTAAGCAAAATGGTTTGGCCACGCAGAGCTGTT
TGCTCACTGACACAGGCTTAAGTGGTTAAAGAACTCACAGGTTGTTTCTCACCATTAAATGGCTATTATGTTATTTTACC
ATCAGTTATACCTCATTTCTGCTTCTATCTTTACAACCTGCAGGCTTTGGTCATTTTTAAAGTCGTTCAAGTTTAGATTG
CATTGACATTAAATCAAATCATAGAGGACAAACAATATATTTTACCGAGAGTGGGCACAGTAAAGAGTTCCAGG
CTTTCTCTCCGACTTTTAGATAGGTCTTTTTTCAAGGCTTCTATCTCCCTAAGAAGTCTGAGAGTTATTACAATTTCT
TTACCTTTTGCTTACATATCCCATCACATAGAAAACCATTTAATAGAATCTATTGTAGCAGAGGCAGAACTTTACCTCT
GCTCTCATAGAGTCCCAGGTAGAACTGATGGTGAAATTGACATAAGGTAGATTAAATAGGTANATTAGTCCATTCTCATG
CTGCTAATAAAGACATACCTGAGACTGGGTAAATGTATAAAGGAAAGAGGTTTAATTGACTCACAGTTCTGAAGGTCTGA
GGAGGACTCAGGAAACCTACAATCATGGTGGAAAGGGGAAGCAAACATGTCTTCTTTACATGGTGGCAGCAAGGAGAAG
TGCTGAGCGAAGCAGGGGAAGTGCCCTTTGTAAAACCATCAGATCTCATGAGAACTCACTCACCATTATAAGAACTGCA
TGGAAGTAACCCCCCACCCTGATTCAATGACCTCCTACTGGGTCCCTCTCATGACACATGGGGATTATGGGAACCTACA
GTTTAAGATGAGATTTGGGTGGGGACACCACTAAACCACATTAATAGGATAAAAGCATGTAAGTTTACATAACACAGG
AGCCCTCATAAGGAAATGAAGACCCAAACAAGTGGCCAAACCTAAATGCTTTTATACTTGGTTGAACAAAGAGAGACGA
CTGTGAAAAAGTAACTAAATATGTGGGAAGACTAAAGGAAGATCAATAAGAAATTTTAAACAAGGTCTGTGTGTACA
GAATTTCTTGTGTGACTCCCATCAAAGAATGTTTCTTTCTCTGCGCAGAAAGACAGCAACTTTCACATGTGAGA
TTTTATCTCTGTTTTTCAAGGAAAAAGGAAAGATAGGGTGGCTTTTTGTCATCTGCTGTTATTCAAGTGCCCTTA
GTTCAAACTAATCCTTATACCAAAAATGGCATATTTGGGGTACATATCTGCCATTCTTCACTACTAAATAACAGAACCA
TATGCTTACCTATGTACTAGCTATTTTCATTTCTGGTATGTGCGCAACAGAAACATATATGCATGAGCCCAAAAAATCT
ACAAAATCTTTATACAGCATTATTTGTAAATAATCCAAATGGAAAAACAGTCCAAGTTTCCATCAACAGAAGATGCATA
CCTAAACTGCCATATAGCAAATATATAGTGAAATATTATACAGCAATGAAAAATGAAACAGTAGTTTACTGCTATAGGC
AACAATATAGATGAATATAATAAACATAATGTTGACTAAATCAATTAAGAAAGAGTACATACTGAATGACTTGATTTCA
TTGTATAAAGTTCAAAAATTTGGTCAAGATAATTTGCCATTTGGGAGATAATAACTGGGATCCTGTCTTTTCCCTTGG
AGAGCTAGAAGAATGGACTCTTCTCAGAAAGGTGACCAAACTTCATAAAATCTCTTTTCCCCAGAACATTATTATTTA
CTTACCTAGGTGCTGCCAACACACCCCATTTGTGTCCCTTTAGTCATTGTATGGAAGGAGGTCAAATGCCTTAGTCTCC
CAGTGACTAGAGCTAGATATCCAGCCATATGAACAGTTTGTAAACCAGGACTCTGAATTCTAATGCCCAATAAGGAG
GGTTGTACTTTTGTGAAAAATAGGCTGGTGACAATTATCTGAGGTGAGAGGAAAGATTCTGTATCATCATTTGTATGAT
CATAATTCTTATTTTGGTTTCTTTACTCATGTTTTTAAAAATATATTTGTAGAAGCTATTATGTTAGGTTTAATAGAA
ATGTAGAAAAACATAAAAATCATTTGCTCAGTGTGATGAATTTTTCATATACTGAATATATCCATGTAACCTCCACATA
AATGTTTGGCATACTCATCTATATTGTTGCTGTAAACAGTAAACTACTGTTTCATTTTCATTGCTGTATAATATTTCA
CTATATGTTTGTATATGGCAGTTTAGGTATGCATTCTTCTGTTGATGGAACTTGGAGTGTTTTCCATTTGGACTATT
ACAAATAATGCTGGTAGAAACATTTTGTAGATTTGTTTGGCTCGCACATACAGTTTCTGTTTGGCATATACCAGAA
ATTAATAGCTGTTAGATAGGTAAGCATATGTTCTGTTATTTAATATTGAAGGATGGCAGAAATATGCACCCAGAAATAT
GCCATTTTGGTATAAGGATTAGTTTGAACTAAGGGCACTTGAATAACAGCAGATGCAAAAAGGGCAGTCTAATCATTTT
CTTTTTCTTCCCCCTGAAAACAGGAGATAAAAACCTCACATGTGAAAGTTGCTCTCCTACTACCAAGAGAAAAGAACAT
TCTTTGACAAGGAGTCATAGCCAGAAGAATCCTGTACACACAGACCTTGTAAATATTTCTTATTGATCTTCTTTTAGT
CTTCACACGTAATTTAGTTACTTTTTCCACAATTTGCCTCTCTTTGTTTCAACCAAGTATAACAGCATTTAGGTTTGGCCAC
TTGTTTGGGTCTTCATTTCTTATGAGGGCTCCTGTGTATGTATAAAGTTTATGTGCTTTTCTCTATTAACTATCTTA
TGTCATTTTCATTATCAGGTCTACCTGGGACTCTAAGAGAGCAGAGGTGAAATTTTGCCCTCTGCTACAGTAGGTTCTAT

Fig. 6. [65]

70/375

[illegible]

Fig. 6.65

71/375

TTGGTTTTCTGTTCCCTACATTTGTTCACTTAGCATAATGGCCTCCAGCTTCAACCATGTTGCTGCAAAGGACATGATCT
CATTTTTTATGGCTGCATAGTATTCATGGTGTATATATAGCATAATTTCTTTATGCAGTCCACCACTGATGGACATTT
AGGTTGAGTCCATGTCCTTTGCTATTGTGAATAGTGCTGTGATGAACATATGCATACATGTGTCTTTATGGTAGAATTAT
TTATATTCCTTTGGGTATAAAACCCATAATGGGGTTGCTGGGTTAAATGGTAGTTCTGACTTAATTTCTCGGAGAAATT
ACCAAACTGCTTTCCACAATGGCTGAACATAATTACATTTCTCACAAGCAGTGTGTAAAGCGTTCCCTTTTATCTGCAACC
TTGCCAGCAAATTAACAAAAAACAAGTATTTTTTGTGACTTTTTTAATCATAGCCATTCTGACTGGTGTGAGATAGTATCT
TATTGTGGTTTTGATTGTCATTGGCCTAATGATTACTGATGTTGAACATTTTTTACATATTTGTTGGTTGTGTGTATGTC
TTCTTCTGAAAAATGTCTGTTTATGTCCTTTGCTCACTTTGTGATGGGGCTGTTTTTTGCTTGTAAATTTGTATAAGTT
CCTTATAGATGCTGGATATTAGACCTTTGTGAGATGCATAGTTTGCATAATTTTTCTCCATTCTGCAGGTTGTCTGTT
TAGTATATTGATAGTTTCTTTTGTGCTGCAAAAGCTCATTTAGTTTAATTAGATACCAATTTGTCAATGTTTTATTGTT
TGCAATTGCTTTTGGCATCTTTGTGATGAAATCTTTGCCAAGACCAAAGTCCAGAATGGTATTTTGTGGTTATCTTCC
AGCATTGTATAGTTTTAGGTTTTACATTTAAGGCTTTAATTCATCTTGGGTTAATTGTTGTATATGATATAAAAAAGA
GGTCCAGCATCAATCTGCATTTGGCTAGTTAGTTATCCTAGCACCATTATTGAACAGGGAATCCTTTCCCATTTGCTT
GTCTTTGTTGACTTTGTCAAAGATCAGATGATTTACGTGGGTGTTATTATTCTGGGCTCTCTAGTCTGTTCCATTGG
TCTATATGTCTGTTTTTGTACCTGTATCATGCTGTTTTGGTTACTGTTGACTTGTATAGTTTGAAGTCAGATAATACGA
TGCCTCTAGCTTTATTCAATTTGCTGAGGATTACCTTAGCTATTACAGGCTCTTTTTTGGTTCCATATGAATTTTAAATG
GGTTTTTCAAATTTTTTGGAAAATGTCATTGGTAGTTTGACAGGAATGGCAATGAATCCGTAAATGCTTTGGGCAATA
TGACCGTTTTTAAACAACATTGATTCTTCTACACATGATGGTTGAATTTTTTTTATTGGATTGTGTTATTTCTGATTCT
TTGTGGCTATTGTAGGATTGTGTTCTGATTTGGTTCTCAGCTTGGATGTTATTGGTGCATAGAAAATGCTACCGATTTT
TGAATATTGATTTTGTATACCTGAACTTTGTGCAAGTTGTTTATCAGATCTAGGAGGTTTTTGGGCAGAGACTATGGGGT
TTTCTAGGTATAAAATCATACTGACTGGTGGAGCAAGATGGCTGAATAGGAACAGCTCCAGTCTAAAGCTCCAGCGT
GAGNGATGCAGAAGATGGGTGATTTCTGCATTTCCAACAGAGGTACCAAGGTTCACTCTACTGGGGAGTGTGCGAAAGTG
GGTGCAGGACAGTGGGTGCAGTGCACCGAGTGTGAGCCAAAGCAGGGCGAGGCATCACCTCACCAGGAAGCATAAGGG
GTCAGGGAATTCCTTTCTAGTCAAAGAAAGGGGTGACAGACGGCATCCGGAATAACAGGTCACTCCACCGTAATAC
TGCATTTTTCCAACAGTCTTAGCAAATGGCACACCAGGAGATTATATCCCGTGCATGGCTCAGAGGGTCTATGCCAC
GGAGCCTTGCTCATTGCCAGCACAGCAGTCTGAGTTCAAAGTGAAGGCGGCAGCAAGGCTGGGGGAGGGGCTCCCGCC
ATTGCCCAGGCTTGAGTAGGTAAACAAAGCGGCTGGGAAGCTCGAAGTGGGTGGAGCCCACTACAGCTCAAGGAGGCT
GCCTGCCTCTGTAGACTACACCTCTGGGGGAGGGCATAGCCAAACAAAGGCAGCAGAATCCTCTGCAGACTTAAATG
TCCCTGTCTGACAGCTTTGAAGAGAGTAGTGGTTCTCCAGCACGCAGCTGGAGATCTGAGAACGGACAGACTGCCTCC
GCAACTGGGTCCCCTGACCCCCAGTAGCCTAACTGGGAGGTACCCCCAGTAGGGGAGACTGACACCTCACACGGCTGG
GTACTCCTCTTAGACAAAACCTTCCAGAGGAACGATCAGGCAGCAACATTTGCTGCTCACCATATCCACTGTTCTGCAG
CCTCTGCTGCTGATACCCAGGGAACAGGGTCTGGAGTGGACCTCCAGCAAACCTCAACAGACCTGAAGCTGAGGGTCC
TAACTGTTAGAAGGAAAACCTAACAAACAGAAAGGACATCCACACCAAACCTCATGTGTACGTCACCATCATCAAAGAC
CAAAGGTAGATAAAACCACAAAGATAGGGAAAAAACAGAGCAGAAAACTGGAACTAAAAATCAGAGCACCTCTCCTT
CTCCAAAGGAACGCAGCTCCTCATCAGCAACGGAACAAAGCTGGATGGAGAATGACTTTGACGAGTTGAGAGAAGAAGG
CTTCAGACAATCAAACCTCTGAGCTAAAGGAGGAAGTTGGAAGCCATGGCAAAGAAGTTAAAAACCTTGAAAAACGA
TAAGACGAATGGCTAACTAGAAATAACCAATGCAGAGAAGTCTTAAAGGACCTGATGGAGGTGAAAAACCAAGGCATGAG
AACTACGTGACCAATGCACAAAGCCTCAGTAGCCGATTTGATCAACTGGAAGAAAGGGTATCAGTGATGGAAGATCAAAT
GAATGAAATGAAGTGAGAAGAGAAGTTTAGAGAAAAAGAAATAAACAAAGCCCTCAAGAAGTATGGGAC
TATGTGAAAAAGACCAAATCTATGTCTGATTGGTGTACCTGAAAGTATGGGGAGAATGGAATCAAGTTGGAAAAACACTC
TGCAGGGTATTATCCAGGAGAACTTCCCCAATTTAGCAAGGCAGGCCAACATTCAAATTCAGGAAATCAGAAAAATGCT
ACAAAGATACTCCTCAAGAAGTGCAACTCCAAGACACATAATTGTGAGATTACCAAAGTTGAAATGAAGAAAAATG
TTAAGGGCAGCCAGAGAGGAAGGTGCGGTTACCCACAAAGGGAAGCCATCAGACTAACAGCAGATCTCTTGGCGAAA
CTCTACAAGCCAGAAGAGAGTGGGGGCAATATTCAACATTTCTTAAAGAAAAGAAATTTTCAACCCAGAATTTTATATCC
AGCCAAACTAAGCTTCATAAGTGAAGGAGAAATAAAATCCTTTACAGACAAGCAAATGCTGAGAGATTTTGTACCACC
AGGGCTGCCCTAAAGAGCTCCTGAAGGAAGCACTAAACATGGAAAGGAAAAACAGTACCAGCCACTGCAAAAACATG
CCAAATTGTAAAGACCATCAAGGCTAGGAAGAACTGCATCAACTAACAGCAAATCACCAGCTAACATCATAATGAC
AGGATCAAATTCACACATAACAATATTAACCTTAAATGTAAATGGGCTAACTGCTTCAATTAAGAGACACAGACTGGCA
AAATAAGGGATGGAGGAAGATCTACCAAGCAAATGGAAAGCAAAAAAGGCAGGGGTGCAATCCTAGTCTCTGATAA
AACAGACTTTAAACCAACAAAGATCAAAGAGACAAAGAAAGCCATTACATAATGGTAAAGGGATCAATTCACAGGAA
GAGCTAACTATCCTAAATATATATGCACCTAATACAGGAGTACCCAGATTCAATAAGCAAGTCTTAGAGACCTAGAAA
GAGACTTAGACGCCCATACAATAATGGGAGACTTTAACACCCCACTGTCAACATTAGACAGATCAACGAGACAGAAAGT
TAACAAGGATGTCCAGGAATTGAACTCAGCTCTGCACCAAGCAGACCTAATAGACATCTACAGAACTCTCCACCCAAA
TCTACAGAATATACATCTTCTCAGTACCACACCGCACTTATTCAAAATTGACCACATATTTGGAAGTAAAGCTCTCCT
TAGCAAATGTAAAGAAACAGAAATTATAACAACTGTCTTTCAGACCACAGTGAATCAAATCAGAACTCAGGATTAAG
AAACTCACTCAAACTGCACAACCTACATGGAACTGAGCAACCTGCTCCTGAATGACTAATGGGTACATAATGAAATGA
AGGCAGAAATAAGATGTTCTTTGAAACCAATGAGAAACAAAGACACAACATACCAGAATCTCTGGGATACATTCAATGC
AGTGTGTAGAGGGCAATTTATAGCACTAAATGCCACAAGAGAAAGCAGGAAAGATCTAAATGAGACACCCTAACATCA

72/375

CAATTAAAAGAACTAGAGAAGCAAGAGCAAACACATTCAAAGCTAGCAGAAGGCAAGAAATAACTAAGATCAGAACAG
AACTGAAGGAAATAAAGACACAAAAAACCTTCAAAAAATCAATGAATCCAAGAGCTGGTTTTTTGAAAAGATCAACAA
AATTGATAGACCACTAGTAAGACTAATAAAGAAGAAAAGAGAGAAGAATCAAATAGATGCAATAAAAAATAATAAAGG
GATATCACCAGTATTCCACAGAAATACAACTACCATTAGAGAATACTATAAACACCTCTATGCAATAAACTAGAAA
ATCTAGAAGAAATGGATCAAGTCTGGACAAATACACCTCCCAAGACTAAACCAGGAAGAAGTTGAATCTCTGAATAG
ACCAAAACAGACTCTGAAATTGAGGCAATAATTAATAGCTTAGCAACCAAAAAAGTCCAGGACCAGATGGATTACACA
GCTGAATTCTACCAGAGGTACAAGGAGGAGCTGGTACCATTCTCTGAACTGTTCCAATCAATAAGAGGGAAT
CCTTCCTAATCTATTTCTGAGGCCAGCATCATTCTGATACCAAGCCTGGCAGAGACACAACAAAAAGAGAATTTT
AGACCAATATCCCTAATGAACATCAATGCAAAAAATCCTCAATAAAATATTGGCAAACCGAATCCAGCAGCACATCAAAA
GCTTATCCACCATGATCAAGTCTGCTTCATCCCTGGGATGCAAGGCTGGTTCAACANACGCAATCAGTAAACATAATC
CAGCATATAAACAGAACCAATGACAAAAACCATATGATTATCTCAATAGATGCAGAAAAGGCCTTTGACAAAATTC AAC
AGCCCTTCATGCTAAAACTCTCAATAAATTAGGTATTGATGGGACGTATCTCAAAATAATAAGAGCTATCTATGACAA
ACCCACAGCCAATATCATACTGAATGGGCAAAAACTGGAAGCATTCCCTTTGAAAAGTGGCACAAGACAGAGGGATGCC
CTCTCTCACCCTCTACTCAACATAGTGTAGAAAGTTCTGGCCAGGACAATCAGGCAGGAGAAAGAAATAAAGGGTAT
TCAATTAGGAAAAACAGGAAATCAAATTGTTCTTGTTCAGATGACATGATTGTATATCTAGAAAACCCCATCGTCTCA
GCCCCAAATCTCCTTAAGCTGATANGCAACTTCAGCAAAGTCTCAGGATACAAAATCAATGTGCAAAAATCACAAGCAT
TCTTATACACCAATAACAGACAAAAGAGAGCCAAATCATGAGTGAACCTCCCATTCACAATTGCTTCAAAGAGAATAAA
ATCTAGGAATCCAACATACAAGGGACGTGAAGGACCTCTTCAAGGAGAACTACAAACCACTGCTTAATGAAATAAAGA
GGATACAAAACAAATAGAAGAACATTCCATAATCATGGGTAGCAAGAACTCAGTATCATGAAAAATGGCCATCTGCCAAG
GTAATTTATCGATTCAATGCCATCCCCATCAAGCTACCAATGACTTTCTTCAAAGAATTGGAAAAAACTACTTTAAAGT
TCATATGGAACCAAAAAAGAGCCACATTGCCAAGTCAATCCTAAGCCAACAGAAAGCTGGAAGCATCACGCTACC
TGACTTCAAACATACTACAAGGCTACAGTCACCAAAAACAGCATGGTACTGGTACCAAAACAGAGATATAGACCAATGG
AACAGAACAGAGACCTCAGAAATAATGCTGCATATCTACAACCATCTGATCTTTGACAAAACCTGACAAAAACAAGGAAT
GGGGAAGGATTCCCTATTTAATAAATGGCACTGGGAAAACCTGGCTAGCCATATGTAGAAAAGCTGAAACTGGATCCCTT
CCTTGACCTTATACATAAATTAATCAAGGTGGATTAAAGACTTAAATGTTAGACCTAAACCATAAACCCAGAA
GAAAACTTAGGCAATACCATTACAGGACATAGGCATGGACAAGGACTTCATGTCTAAACACCAAAAGCAATGGCAACAA
AAGCCAAAATTTGACAAATGGGATCTAGTTAAACTAAAGAGCTTCTGCACAGCAAAAGAACTACCATCAGATCAACAG
GCAACCTACAGAAATGGGAGAAAAATTTTGCCATCTACTCATCTGACAAAGGGCTAATATCCAGAATCTACAATGAATC
AAACAAATTTACTAGAAAAAAACAAACACCCCATCAACAAATAGGCGAAGGATATGAACAGACATTTCTCAAAGAAG
ACATTTATGCAGCCAAAAGACACATGAAAAAATGCTCATCATCTAGCCATCAGAGAAATGCAATCAAAACCACAAT
GAGATACCATCTCACACCAGTTAGAATGGTGATCATGAAAAAGTCAGGAAACAACAGGTGCTGGAGAGGATGTGGAGAA
ATAGGACCACTTTTACACTGTTGTTGGGATTTGTAACCTGGTTCAACCATTGTGGAAGACAGTGTGGTGATTCTCAGGG
ATCTAGAACTAGAAATACCTTTTGACCCAGCCTTCCCTTACTGGGTATATACCCAAAGGATTATAAATCATGCTGCTAT
AAAGACACATGCACACGTATGTTTATTGAGGCATATTACAAATAGCAAAGACTTGAACCAAGCCAAATGTCCAACAA
TGATAGACTGGATTAAGAAAATGTGGCACATATACACCATGGAATCTATGCAGCCATAAGAAATGATGAGTTCATGTC
CTTTGTAGGGACATGGATGAAGCTGGAACCATCATTCTCAGCAAACTATCACAAGACAAAAACCCAAACACCGCATG
TTGTCACTCATAGGTGGGAAGTGAACAATGAGAACACATGGACACAGGAAGGAAACATCACACACTGGGGCCTGTTGT
GGGGTGGGGTGTGGGGGAGGGATAGCATTAGGAGATATACCTAATGTTAAATGATGAGTTAATGGATGCAGCATACCA
ACATGGCACATGTATACACATGTAACCAACCTGCATGTTGTGCACATGTACCCTAAACCTTAAAGTATAATAATAATA
AAAATAAAATAAAATCATACTGTCCGCCGGGTGCAGTGGCTCACTCCTGTAATCCAGCACTTTGGGAGGCTAAGGTGG
GTGAATTGCTGATCTCAGGAGTTCGAGACCAGCCTGGGCAACATGGTGAACCCCGTCTCTACTAAAATACAAAAAAT
CAGTTGGGCATGGCAGCATGTTCTGTAAATCCCAGCTACTCGGGAGGCTGAGACAGGAGAATTGAACCTCAGGAGA
TGGAGGTTGCAGTGAGCTGAGATCGTGCAACTGCATTCCAGCCTGGGTGACAGAGCAAGACTCCATCTCAAAAAAAA
AAAATCATACTGTCTGCATACAGATAGTTTGACTTCCTCTGTTCTTATTTGGATGCCCTTTTATTTTCTCTGCTG
TTGTTCTGGCTAGGAGTTCGAGTATTGTGTTGAATAGAGTAGTAGTATTTGGCATCCTTGTCTTGTGCTGGCTCTC
AAGGGGAATGCTTCTAGCTTTTACCTATTAGTATGATGTTGGCTGTGGGTTTGTATAGATGGTTGTTATTTTGAAGT
TTGTTCTTTAATGCCTAGTTTGTGCTGAAGTTTTTAAATGAAGTATGCTTAATTTTATTGAAAGCTTTTCTCTCATC
TATCAAGGTGATCATGTAGTTTCTGTTTTTAGTTCTGTTTATGTGATGAATCACATTTGTTGATTTGTGTATGTTGAAC
TAACTTTGTATCCCAGGGATAAAGTCTACTTAATCATGCTGAATTAGCTTTTTGATGTCCTGTTCTGATCCAGGACATAG
TTTGCTAGTATTTTGTGAGGATTTTTCCACCTATGCTCATCAAGGATATTGGCCTGATGTTTTCTTCTCTCTGT
TTCTTCCAGGTTTTGGTATCAGAATGATGCTGGCCTCATAAATAGATTAGGGAGGAGTCCCTCCTAGTCAGTTTTTT
GAATAGTTTCAGATAGAATTGTACCAGTCAGCTCTTTGTATGCTGGTAGAATATGCCTGTGAATCTTTCTAGTCCTGG
GCTTTTTCTGGTTGGTAGGTGTTTTATTACTGATTACAGCTTCAGAACTTGTCAATTGGTCTGTTTCAGGATTTGAATTTCT
TCCTAGTTCAATCTTGGGAGGTTGTATGTTTCCAGGAATTTACCCTGAAAAATTCTAGGTTTTCTAGTTTGTATGCATA
AAGGTGTTCAATTATAGTCTCTGAGGGTTTTTGTATTTCTGTTGGGTGATGGTAATATCCCTTTTACCATTTCTGATT
TTGTTTATTTGGATCATCTCTTTTTTTTTCTTTGTTTGTCTAGCTAGTGGTGTATCAATTTTATTTATTTCTTTCAA
AAACCAACTCCTGGATTCAATTGATNTTTCAATTTTTTTTTGTTTTGCATTTCAATTTCAATTTCTGTTCTGATTTTG
GTTATTTCTTTCTCTGCTAGCTTTTGGGTTGGTTTGTCTTTTTCTGTTTTCTCTAGGTGTGATGTTATGTTGTTAA
ATTAAATCTTCTAACTTTTTGATGTGAGCATTTAGCACTATAAACTTCCCTCTTAACACTGCTTTAATATTGATAAG
ATAGAGATTCTGGTATCTTGTATCTTGTCTCATTCATTTCAAATAATTTCTTGATTTCTGCCTTAATTTCAATGTTT

73/375

ACCCAAAGTCATTTCAGGAGCAGGTTGCTTATTTTTTCATGTAATTGTATGGTTTTGGGTGATTTCCCTTAGTACTGATGA
 AATGGTTTTGGCTCTGTGTTCCACCCAAATCTTGCCCTTGAGTTGTAATTGTGTCATAATCCCCACGTCAAGGGTGGGACCA
 GGTGGAGGTTATTGGATCATGGAGGTGGTTTTCCCCCATGTTGGTTCTTGTGATAGTGAGTTCTCATGAGATCTGATGGTT
 TTATAAGCATCTGGCATTCTCTGCTTGCACTCACTCCACTGCGCCCTGTGAAGAAGGTGCCTGCCTTTCTTTTG
 CTTCTGCCATGATTGTAAGTTTCTGAGGCCTCTAGGAGTGAGAAGTCAATGAAACTTTCTTCTCTTTATA
 AATTACCCAGTCTCAGATATTTCTTCATAGCTGTGTGAGAATAAACTAATACTACTGATTCTATTTCATTAAGCTGT
 GGTCTGAAAGTGTGGTTGGTATGATTTCCGTTTTTTTTGAACTTGCTAAGAATTGTTTTATGACACATTGTGTGGTTGAT
 TCTAGAGTATGTACCATGTGCAGATGAGAATAATGTATATTCTGTTATTTTTGGTTGGAGAGTTCTGTAGATGTCTGTT
 AGGCCAATTAGGTGAAGTGTAAAGTTTCAGGTCTCGAATATATCTATGTTAGTTTTCTGCCTCAGTGCATCCATCTGATAC
 TGTGAATAGGGTGTGAAAGTCTCCCACTATTATTATGTGGTTATCTAAATCTCTTTGTAGGTCTCTAAGAAGCTTGT
 ATGAATCTGGGTGCTCCTGTGTTGGGTGCATATATATTTAGGATAGTTAGGTCTTCATGTTGAATTGAACCCCTTACCA
 TTATGTAATGCCCTGTCTTTTTGATCATTGTGAGTTTACAGTCAATTTTGTCTGAAATTATAATACAAACCCATGCCT
 TGCTTGGTATAATTTCTTCATTCCCTTTACTTTGAGCCTATGAGTGTCACTGCATGTGAGATGGGTCTCTTGAAGATAG
 CATAAGTTAGGTCTTGTCTTTCTTCATTCAACTTGCCACTCTGTGCTTTTTAATTGGGACATTTAGCCCATTTACACTCA
 AGGTTAACATTGACATGTGTGGAGTTGATTCTGTGTCATCATGTTGTTAGCTGGTTATTATGCAGACTTGATTGTGGAGTT
 GCTTTATAGTATCAGTGCATCTATGTACTTAAAGTGTGTTTTTCATGGTGGTGGGTAATGTTCTTTCTTTTCATATTTGGT
 ACTTCTCTTATGGACTTCTTGTAAATGCAGGTCTGGTGGTAAATGAAATCCCTTAGCATTTGCTTCNCTGAAAAGATTATAC
 TTCTCTTTTGTATGAACTTAATTTAGCCAGATATGAAATCTTGGTTGGAATTTCTTTCTTTAAGAATGTTGAAT
 ATAGGCCTCTGGCCTCGTCTGGCTTGTAGGGTTTCTGCTGAAAGGCCCTGCTGTTAGCCTGATGGAATTTCTTTTGAAGG
 TGACTTGCCAGCCGGCGCGGTGGCTCACGCTGTAATCCAGCACTTTGGGAGGCCAAGGCGGGCGGATCACCTGAGG
 TTGGGAGTTTCGAGACAGACTGACCAACATGGAGAAACCCGCTCTACGAAATACAAAATACAAAATTAGCCAGGCG
 TGGTGGCACATGCCCTGTAATCCCGCCCTGGGGAGGCTGAGGCGAGAGAAATGCTTGAACCTGGGAGGTGAAGACTGTG
 GTGAGCTGAGATCGCTTCATTGCATGCCAGCCTGGGCAACAAGAGCAAACTCCACCTCAAAAAAAAAAAAAAGACT
 TATTTTAATGAGTTGGACTCAGATTAGCTAATAAAAAATTGCCTAAGTGTGAACCTTCATATTTCTTATGTATGGGGAAT
 GTTACGAGGTATGCTGGTGGGAACACAGGAGAGCACATGGAATGATTATCCCCCACTTGCAAAATTTCTTGTGTTGGCTA
 GAAAGGGAACATACTTGTACAAAAGGCATAAAAAAGATGTTTAAAGAGGTGAGCAAAAGGCTCAGAGAGTAAGAGAAAGTA
 GAGACTACAGAAATATTCCATAAAGGAAGATTGAGGAAGAGTGTGTGAGAAAGTAGAGCAAGAGCGAAGGTGGATTG
 CTGACTACTACTAATCCATTTCTCAGGAGCATGTGCAGATGCACATGGGAGGTTATAATGTCGGTATCTGTTAGAACCC
 TATTCTGTTGGCCAGAAGTCAATCACACAACCCCACTTTTCTGCTAGGGTGGCTGAAAAATACTTTACCTGTGTTCCCTG
 GAAGGAAAGTGAGGCTTTTTTGGAGCATTTAACCAGTCTCTGCTACACACCCACTGGAACCTTTGCAGAAATAAATTCAGT
 TCCTCTCCTCCTCATTCAATTTTTTAAACCTTCCCTTCTCCAAGTGAGACACTGTTAGTTCTATCAACTATTATTTCATAT
 ATTTATTTTTGTTCCCAAACCTCTACTATCCTGGCCATCATAAAGCAAACTTCTTGATTTTTATTGTTCTTCTCAAA
 ATGAGATGCTCACTGTAGAACGTAATACTGTATATGTGATTTTTTAAATGCTGGTAAAGTGGGATTATTGTTTTTCATT
 GATTTTCATAACTATCAGGTCAAAGAGAGGGCCAGATTGGGGACTTTGCATTTTTTAAAAAAGAGAATTTGAAGAAGGA
 AAAGGTCTCCAGGATGCCACTTCAGTATGGCAGCTGTGGGAAGCACTAGTGGTAAGGTGCTAGCTATTCTTCTCTACT
 TCTCCAAGAGGAAAAAGGGTACTCACACTCACAAATCAATTCATTTCCATCAAACTCCAAAGTGAAGTCAAGGAGAAT
 AAGTGCACTCAAATGAGTTACTTATATATTAGATTATGGATTTAAATAAAACACCAAGGATTTCTGTATTAAATCTT
 TTTATTGTGATGTTAAGTACTCCACATGTCTTACATAGTATCTAGGTCTTATGCTTAATAATTTGGCCAGTAGTCCAAA
 TTATTACATGATATAAGCAAATTAGCATTGCTATAAGAACTAAATTTATCACCTGCTGCTAATATGGCATTGATG
 TTGTGCCATTTTCAGCATATCCCTATGGCCCCATTCCTGATTTTTCATCTGTAGATCCAGTGAGGAGAGAAAAAATGA
 GTCGTTTTTTCTGTTCTTTTCTTTCAACAGTTGTGCTTTTCAGTTCTCTGTTAAGAAATATTATAACCTGAGGGAG
 TGAATGTTCTTATCAGAGAAGAGAAGTGGTTGAAAATGATTTAGTTTCTGAATTCCTAGAAGAAGGAAAAAGCCTAAG
 TGTCCATCTCTCTATCTAGTCTACTAATAGGATTACCTATTTCAAATATATATAATTTTCTAAATGAGTTTAAATG
 TCAAAGTTTCAGGATCCACTGGTTTCCATAGTTTTAGTTTGTCCAGTTGTTTATGGTTAGGCTCATTGTGAACAGTAC
 CATTATACTTCTCTTTTTCTATAAATGTGGCTGCTTTTGAAGTGAAGTTGTAGGAAACAGAATTCATTGTAATCTGA
 ATTTAAATTTAGCTTCTGTTGTCAGCTCCTCCCCCTCCCCCTCCTCCCTCATGTTTCTCCCTGTCCCAGACTGTCTTTC
 AGAGGCAGATGCTATGCACATAAATGACATTTATTGATTTGAGTATTAGAGACTTTTTCTTGACAGACTCACCCATCAC
 AATATTTAAGTAATATTAACAGTTTCCCACCAAGAACTCAGAGTAACTAAACAGTGAGTATCCAGGCAGAAAGCCATG
 TACTTTTAGAGCTCAATATGTTTATAATATATATGAAGGCAACATAGAGGCAACATAAATACCTATTCTACTTGGTTG
 TAATCTGCCAATTTATATTTTTTCGGAGAAAGTTTATCACTAAATCACTGAGAGGCAGAGTAGGATATCTGGGGGAAT
 GGTGGTGGGCGGGGGGCAAGTTTGTATCTGGAAGAAAGATTGGGAGCCAGGAGGATTTTCAAATTCGAATCCCTCAG
 CTCAGTCTTGGGGCATTGTTTTGCCATCTGAATTATCTTGGAAACCCAGAGAAAACTGGTTGTGAAAACCTACAGATGC
 AATTTTCTTCTTTGGCTTTTCCCATATACTGTAATTATAAACCATGCTGTGTTAGAGTGGAAACATTCTTTGGAGAGCA
 TCCTAAAGTGCATTTGATCAAATTTTGCCCTTATGTGGCAACATTTAGAAACACAAGCCTTCGTGGGGTTTCTGGCTCT
 ACTTTTTACTGATGGGCTGATAATCTTATAGTAGCATTAGTTTTGCCACCAATTACCAAAGATTTGTTATTATTGGTTT
 TTAATAATTGGACAATCTTAAATGTCTACAGCAACGTTAGAAACAGACCCACAAGTGGGTGGGTCAGACTAGTTTGGAA
 ACCCTCAATCTTGGCTATTGTTGACCTCAGAATTCAACAAGGGATGTTGGAAAAATTTTCAAAATAAAATTAATTTAAAT
 TCAGTTTTGCAAAAGATTATATACTATAGAACACATTGAAAAAGAGAAGGTAGCTGGAAAGTCAAAACATAATAGAATTTG
 AAAATTAAGGCTTTAAGTTATGAAAAATTTCCCATATGTTGAGACAGAATTTGTATTCTCTTTTTCTCAATGGCA
 TTTTATGAGACTATATACTGCTGCTCTTCTGTATAAATAGAAATAGAAACATCTCCATTTTAAATGTGATGGAATAA

74/375

[illegible]

Fig. 6. 697

75/375

GGGCGACAGAGGAACTCCCCTCTCAAAAAAAAAAAAAAAAAAGAAATCCAGATATAACCACACAATTACATGGCAAT
TGAACAACCTGCTCCTGAATGACTCTTGGGTAAATAATGAAATTAAGGTAGAAATCAAGAAGTTCTTTGAACTAATGA
GAAAAAGAGACATCATACCAGAACTCTCTGGGCCGTAGCTAAAGCGGTGTTAAGAGGGAAATTTAGGCTGGGCACGGTG
GCTCACGCCTGTAAATCCCAGTACTTGGGGAGGCCCTAGGTGAGCGGATCATTTGAGCTCAGGAGTTTGAGACCAGCCTGG
CCAACATGGTTAAACCTGTCTCTACTAAAAATACAAAAGTAGCTGGGTGTGTGGCAGCAGCTGTAGTCCCAGCTAC
TTGGGAGCCTGAGGCAGGACAATCTCTTGAACCTGAGAGGCGGAGGTTGGAGTGAGCGAGATTGTGCCACTGCCACTCCA
GCCTGGGTGACAGAGTGAGACCCTGTCTAAACAAAAACAAAACAAAACAAAAAACAAAAATTTATAGCACTAAAT
TCCCACATCAAAAACTGGAAGATTTCAAATTAACAATCTAACATCACAACTAAAGGAAGTAGAGAATCAAGAGCAAA
CAAAACCTAAGCTAGCAGAAGACAAGAATAACCAAGATCAGTGTTGAATTGAAGGGGATAGAGACACAAAAAATCCT
TCAAAATATCAACAAATCCAGGAGCTGGTGTCTTTGAAAATAATTAATAAAAGAGACTGCTAGCTAGACTAAAAAGAAT
AAAAGAGAGAAGGATCAAAATAAACACAATTAGAAATGATAAGGGGGATATCACCAGTACTCCACAGAAATTCAAATAA
CCATCAGAGAATACTTTAAACACCTCTATGTATATATATTGAAAAACTAGAAAAATGGGTAAATTCCTGGACACATA
CACCTTCCAAAGACTGAACCAGGAAGAAATTGAATCCCTGAACAGATCAATAACAAGGTCTGAAATTTGAGACAGTAGTA
AGTAACCTACTAACCAAAAAAGCCCTGGACTAGATGGATTAAACAGCTGAATTTACCAGAGGTACAAAGAAGAGCTGG
TACTATTTCTGCTGAACTATTCCAAAAAAGGAGGGACTCCTCCCTAATCTATTCTATGAGGCCAGCATCATCTGTA
TACCAAAACCTGGCAGAGATATAACAAAAAAGAAAACTTCAGGCCAATATCCTTGATGATCATTTGATGCAAAAGTCCT
CAATAAAATACTGACAAAACAAATCCAGCAGCACATCAAAAAGCTTATCCACCATGATCAAGTTGGCTTCATCTCTGGG
ATGCAAGGTTGTATCAACATATGCAATCAATAAATATTATTCATCCTATAAAAAAACTAAAGACAAAAACCACATCA
TTATCTCAATAGATGCAAAAAGGCCTTTGATAAAGTTCAACATCCACTCATGTTAAAAACTCTCAATAAACTAGATAT
TGAATGAACATACTCCAAAAATAAGAGCCATATAGACAAATCTACAGCCAATATCATACTGAATAGGCACAAAAACA
AGGATGCCCTCTCTCACCATCCTATTCAACATAGTATTGGAAGTTCTGGCCAGGGCAATCAGGTGAGAGATAGAAATA
AAGGGTATTCAATAGGAAGAGAGGAAGTCCAGTTATCTTTGTTTGCAGATGATATGATCCTATATCTAGAAAAAGAT
AGTTTCAGCCCAAAGCTTCTTAATCTGATAAGCAACTTCAGCAGTCAGGATACAAAATCAATTTGCAAAAGTTGCTGG
TATTCCTGTACACCAACAGCAGGCAAGCAGAGAGCCAAATCATGAATGAACCTCCATTCACAATTTACAGAAAGAAT
AAAATACCTAGGAATACAGCTAGCAAGGGAAGTGAAGGACCTCTTCAAGGAGAACTACAAACCAATGCTCAAAGAAATC
AGACATAACACGAATGGAACAACATTTTCATGCTCATGGATGGGAAGAATCAATATTGTGAAAATGGTCATGCTGCCTAA
AGTAATTTATATATTTCATGCTATTCCATTAAATTACCATTGACATTCTTCACAGAATTAGAAGAACTATTTTAAAT
TCGTATGGAACCAAAAAAGAGCCCAAATTGCCAAGACAAGCCTAAGCAAAAAGAGTAAAGCTGGAGGCATCATGCTACC
TGACTTCAAAATATACTACAAGGCTACAGTAGCCAAAACAGCATGGTATTGGTATAAGAACAGACACAGAAGGCTGGGC
GCATTGGCTCACGCCTGTAACCCACAGCATTTTGGGAGGCCTAGGCAGGCAGATCATGAGGTGAGGAGTTTGAGACCACC
CTGACCAACATGGAGAAACCCCATGTCTACTAAAAATACAAAATTAGCCAGGTGTGGTGGCATGCACCTGTAATCCCA
GGTACTCAGGAGGCTGAGCCAGAAGAAATGCTTGAACCTGGGAGGTGGAGGTTGCAGAGCTGAGATCGTGCCACTGCAC
TCCAGCCTGGGCAACAGAGTGAGACTCCATCTCAAAAAGAAAAAGAAAAAAGAAACAGATACATAGCCCAATGGA
AGAGAATAGAGAACTCAGAAATAATACCACACACCTCCAACATCTGATCTTTGACAAATCTAACAGAAACAAGCAATGG
GAAAGCATTTCCATCTTAATAAATGGTGGTGGGAGAACGGGCTAGCCATATGCAGAAAATTGAAATTCGGCCCCCTTCC
TTACACCATATACAAAATTAACCTAAGATGAATTAATACTTAAATGTAAACCCAAAACCATAAAAACCTTAGAAGA
AAATCTAGGCATTACCATTGAGCATAGGTACAGGCAAGATTTTCATGATGAAAATGCCAAAAGCAATTGCAACAAAA
GCAGAAATTGACAAATGGGATCTAATTTAACTAAAGAGCCCTGCACAGCAAAAAAACTATCATCAGAGTGAACAGA
CAGCTTACAGAAATGGGAGAAAATTTTGTCAATCTGTCCATCTGACAAAAGTCTAGTATCCAGAGTCTACAAGGAACCTA
AACACATTTACAAGAAATAAACCAATGGCCCAATTAATAAGTGGGCAATGACATGAACAGACACTTTGCAAAAGAAAA
CATTCATGCAGCCAAACAGCATCTGAAAAAAGCTCAGCATCACGTCAATTAGAGAAATGCAAAATCAAAAGTACAAATGAG
ATACTATCTCACACCAGTCAGGACAGCTGTGATTAAAGATAAAAAAACCAACAGATACTGGTAAAGTTGTAGAGAAAA
GGAATGCTTTTACACTGTTGGTGGGAGTGTAATTTGGTTCAACTGTTTGGGAGACAGTGTGGCGATTCTCTCAAAGACC
TTGAGGCAGAAATACCATTTGAGCCAGATCCCATTACTGGCTATATACCCAAAGGAATATAAATCATTTCTATTATAAG
ATACATACATGTGTATGTTTCATCACAGCACTATTTACAAAAGCAAAGACATGGAATCAACTTAAATGCCACCAATGAT
AGACTGGATAAAAGAAAAATATGGAACATATACACCATGGAATGCTATGCAGCCATAAAAAAGGATGAGTTTCATGTCCTTT
GCAGGGACATGGTTGGAGTTGGAAGCCACTGTCTCAGCAAATAATGCAGGAACGGAAAAACCAACACCACAGGTTCT
TACTTATAAGTGGGAGCTGTATGATGAGAACACATGGGCACATGGGGGAACAACACACACTGGGGCTGTGGGGGTGGG
GTGGCTTGTGGAGAGGGAGAGTATCAGGAATAATAGGTAAATGTATACTGGGCTTAATACCTAGGTGGTGGGATGATCTG
TGCAGCAACCACCATGGCACATGTTTACCTGTGTAACAACTGCACATCCTGCACATGTACCCTGAACTTAAAGTT
GAAGGAAAAACAAAAGAAGGATATGTTCTTAGTCTTATACCTATGAGCCAGTCAATTGGAAGTGAAAGCTGGGTAT
GCCAAGGAATAACTAAATTCCTTTACGGTTTCAAAGTTAGAACCTATTTTTCTCTTAAGATTATGGAATTGATTATCC
AATACTTTTGGTTTTAAAGGCTGTCTTCAATGGTTTTAGTGACAAGTTGGTTCACAGCAGCATTACATGATTTTAGCCAG
AAGCTATTTTGAACCTAAATTCCTATCAGAAGGTTGAAAAAACCTAATTTTACTTTTATTTAGAGCTTGTGTGCTA
ATTATTTGATTTTAAATTTCCGACTCCACTTGAATGAAGACACAATCCAGTAGTTAATATTAAGTATGAACCTTTCA
ATTGTTTCTTTTCTTTCTTTTGGAGATAAGAATCCCTCAAAAGAATAAGTGAAACAGAGACTTCAAAGTTCCGTGG
TGACTGTTGAAATATAACAGAATCGCACTGTGTTGAATTTACTGTGATATATTTCTAATGTCTTATTTGGTATGTT
TCTCTTGTGTTATTGCTGACACAAACCAAGAACAAGAAATTTCTTTATGCCACTGATTTGCAAGGTGCTATAGAAA
ATGAAGGGTCAGATAATGGATGTTAATCATCCTCATTGATGGATACATTGACAGGAAACATAATTGAATTGCACATAT
TAGTGGAAGATAAAAAACCATTTCAAAATCGTTCTTAGTAGAGAAAAAATGATAGGAGAGCTAAAATTGATGTGAAA

76/375

AACACAGAAGGAAGTTAAGGGATTAGAGTGGGAGGGAATTAGTGAATATCTATTTGTGTGCATGATTGCATTTTTGAA
ATAATTAGTTGCCTAATTTGTGTATCCAAATATAGTAATTGTTTTTCCATAGTCATGACTTAAATATTCTCTGTGTGTA
ATTTTCAGTTGCATACATTTTTTTTGCAGAATCAAATTGCAGAGGAATACATTCATTTGAAATTTCTCTAGGGATGTGTT
TATAACCCATTTTGGAAAGAGTAGAAAGATTTTTTTCTCTTCCAAATGGCTATGAAGGTGGATAACTTCTCTGATCTT
TTAGTAAACACTTTTATGTAGTTGAATGGTATGCAGTTAGTCATAAACAGGAGAGATTGAGGAAAAATAACATGCTTA
ATGCAAATAAATTTCTGTACCTGATAAGTTAATTGGAATTTTTCTGTAAATCTTTTTTTTTTATTTTTCTGGTAG
ATGCTTGTGTTAATTAAAGTAAGATAGAAAAGAATCATCAAATATATGTAAACCACAGCCAAATGATGAATTCATAGTT
TTTGCTCAAGTAGAGGGATTATCTGAAAGTACAAAAAGAATTTGATAATTGAGAAATACATTATTTTGAATGCACATTT
GAAGTAGCTAAAAATTCTACGCCACAGCTGAATGCACTGGCAGTTTGTAAATCACATCCATAAACATGAGTCTTCTACA
ATTGGAGTGGGCCCCACACTTGGAAACATCTTGAAGATGTTTCTTCTTTGGCTGTGCTAAATTAAGCATGCAAGAAGTT
ATATTGTGTAAACATTTCCACAATGAAATCTTATTGGCACTTCTGTATAAGTGGCTGGGAATAGAAATTCTCATTAT
GAATCAAAACACTTTGCCTTTTTTATTTGGAGGTCAACCTACTAACCTTTGGTTATAGGATAATACCAGCAATTTTATTA
TAAAGTGTATTTTCAAGTAATTGGAACGTGTGTTTTGATTATACAATTGGATAGAATGTATAATAAATGAAATGAAAGAAA
TTTCTCCCAGAAGATTGAGTTAAAAATGTTTTGGTGATGAAATGAGATGATGTCCAGATTTATAGCATGTTTGGTAAC
CATAACATACTTCTCGATATATTGAATTCATGTAAATGCTTATTTCTTCAAACCTTTAAATTTTCAAGATTTTTCTC
CCTTCTGTTTATTAATCAGTTCTATTATAGTGGATCTTAGAAAATTATCCAGTGATTAATATTTCTCCATATTTGTAGC
TTTCATTACTTTTATATTTCTGTTTTTGCCTAGGCTCCTTGTACCAGCCTGTTCTAATGTCACAAAACCTTGGCAAACCC
TACCCAAGAAGGGTAAAGTTTAGTATCTATGAATTTTGAATAACTTGATGAGAAAAGTTGCTTTTAAATATTTTGAA
TCTTATTAATACCAAAATATTTGAAAAGAGAAGCAGGTACATTTTCCAAATATTCAAATTCATCAATGTATAAAT
ACTCAAACCTTTTTTTTATAAATTATCTTAAAGTTCTGGGATACATGGGCAGAACGTGCAGGCTTGTACATAGGTATA
CATGTGCCATGGTGGTTTGTGTCACCCATCAACCCATCTACATTAGGTATTTCTCCTAATGCCATCCCTCCCTTG
CCCCCACCTCCCGACAGGCCCTGGTGTGTGATGTTCCCTCCCTGTGCCCATATGTTCTCACTGTTCAACTCCCCTT
ATGAGTGAGAACATGTGGTGTGTTTTGTTTTCTGTTCTGTATTAGTTTGTGAGAAATGATGGTTTTCCAGCTTCATCCATG
TCCCTGCAAAGGACATGAACCTATTCTTTTTTATGGTGGCGTAGTATTCCATGGTATATGTGCCACATTTTCTTTATCC
AGTCTAATATTGATGGGCATTTGGGTTGGTTCTAAATCTTGTGTTGTGAAAAGTGCTGCAATAAACATATACGTGCA
TGTGTCTTTTGCAATAGCATGAGGGAAGGAGATTGGAACATGACTCATTGTACAATTTAAATACGCCAACTTTGTG
AACTTTTATTACAACCTGGAAGCACTTATGGTACTTATTAGAAAGAAAGTGTGTGTGGATACGTATGTGTGTAATAA
TGGCTCTTCTTAAAGGAGGCTTACCCAGTCATTTTTTTTTTGAATAATAGCTGCATTGGAGGTAAAGAGTCACTCAAG
ACATTTTCTCTAATTGTGTCAGGAAAAAACAAATAAAGGAGATGAAGACTAGGCTGCTGTCTATTCTGTGCCATCTGAC
ATCTATGGAAGCCTAGAGGCCCAAGAATACCTCCCTCCCGAGGTGCTATTGTCAGTATCTTCCAGGTCTGAGTCTGAA
TGTTCTTATTTTATGTAAGCATTGTACCCAGAAGATGGGTGAGAACCTCTCCTATGGTCTGAATGTTTGTGTCCCTCC
AAAATTCATATGTTGAAGTCTCACCTCCAAGGTGATTGTATTAGGAGTTGAGGCCTCTAGGGGGTGTGTTAGGTGATCC
TCATGAATAGGACTGGTGTCTTATAAAAGAGGCCCTAGGGATCTCCGTAACTCTTCCACCATGTGAGGACACCGTGA
GAAGGTGCCATCTATGATGAAGCTGGCCCTTATTAGACATCAAATTTCTGTTCTCTTGTGACTTCCAGTCTA
CAGAATGTGAGAAATAAATTACTGTTGTTTATAAGCCATTGTGTTTGTGGCATTTTGTGTTTATGGCAGCCAGGTGGACT
AAGACAGCCTTTTAAATAGGCAAGGGGATCTAAAGACATAGGTGAACCAAGCAAGTCAGTCTGCAGCTCAGAAAACCTCAA
GTCCCCATTACAGGCAGCTGCCTGATGATGTTAGCTGTAATCTCCTGTGTTTGTGCTGACTTGTGCTCAGTTTAGCT
CAGTGGTTCTCAACTGGGGCAACTTTGACCATAGGACATTAGGCAACGTCTGGAGACATTGTACAGCTAGAGGAAG
GGTGTACTGCCATCTAGTTGGTAGAAGCCAGGGTGTCTGCTTAAACATCCTGCAGTGCACGGGACAGCACCTCCTCCCA
TCCCAGCAAGGAGTCATCTGTAGGAATATTTGATAAAAGCCATCTACATAAAAGCCCAACAGCTCACATCATAATTA
GATGAAAGACTGCTTTTCCATAAGATTGGGAACAAGGTAGTAATGACTGTTCTCAAATCTCTATTCAACATTTTACTG
AAGGTCTTAGCAACAGTGCAAGAAGAATAATTAACCTCATACAATTTGCAAAAGCAAGAAGTAAAGCAGCTTTTATTCA
CGTATGACATAAACAGATACTTAAATAACCATAAGGAATAGCTTCCATAAAAGGGGACTTGAACCAATAAGTGAGTTTAG
AAAGGTCTCAGTATCTCAGTCAATAACAAATTTAATCATGTTTATAAATACAATGGACAATTAACCAATAATTTAAAC
ATTTCAATTTCTTATAATGCCAGAAAATAGAAAATACCTTAGTAGCAATTTAATGAAATATGTGCACAATTTTATACTG
AAAATATAATTTACCAAGATAAATTTAAGAAGACTTCAATAAATGGAGAGATATACTTTGCTCATTGATCAGAAGACT
CAATAACAATTTAGGATATTAATTTTTCTTGAATTAATCTATATATTCAAATTTATCTTAATCTTCATCACAATGGCTT
TTATTTTATAGGAATTGACAAGCTTATTTCTAAAATTTATATGGGAGAGTAAAGAAGGTAGAATAGTCAGAATAATCTTG
AAAAACAACAGCAATTTCTACCTGACTCTATAAAATATAGTTGTATTATAACTGTAAAAATACAGTTGTATTAAAGATTA
TGAGGTTTTTGACATAAGGATAGACAAAATAAATGAAGGAAATAAAGAGTCCAGAAATAGACACACATTTATAAAGTAAA
TTGATTTTTTTTCAAGACACCAAAGCAATTAATAAAGGAATGGAGAGGCTTATTTATAAATGAAATTTGGAATAAATTGA
TATCCATATGGGAAAAAATAAATTTTCACTCCCTAAATTCACACCTCAGACAAAAATCAATTCAGATGGATTGGAGA
CCTAAAAGCAAAGGTAAAACCTGATACTTCAAGAACAGAACATGACAGGATTCAGAAAATTATAACCTCAAAATTTGG
TAAATTAGACTGCTCATCAAAAGACATACGTAAATGAGTAAGAGAGCCACTAACAGGACAAAAATATTTGTAAACATA
TCTGACAAAGGACTTTAATCAATATACATAAAGCACATCTACATTAATAAGATAAAGACCAAGAAATAGCTCAATA
AAAATGGGCAAAGCATTTCAGGGGACACTTTACAAAAGTAAATATACAAATGGCCAATGAACACAGTAAAGAGTGCTCC
ACATCTTTAGGCTTCAGCTAAATGCATTTACAAACCAAGAAATACCACCACACATCCACTAGAAAGGACAAAATTA
AAAGGTTGAAAACACCAATACTGGTGAGGAGTTAGAACCACTGAACTCTTACACTTGTGATAGGAAAAATTAATGTT
GTAACACTTTTGAATAATGTTTTGAGATAATAAATGTTACTTTACCTACCTTTGACCTAGCAATTCCTACTCTAT
TGTTTACCCAGAAGCAATTTTATGTTACATAAAAAATATATACATAAATACTTGTTAAAAATATTCATAAACC

77/375

CACATATTCATAAACCACATATTAATCAAAAGAGAATCAATAAAACAATTTTGTACAGTTATACAATGGAGTATTAC
TCCGCAACAAAAATGAATGAACACTACTGATACCTGCAACAAAATGAGTGACTCTCACAGACAAAATGCTGAGTCAAGGAA
TCGAGACAAAAGGAATACATGTGGTATGATTCCATTTCTAGGAAGTTCTAGAACAAAACCTTAGGTTAGAAAAAGGGAA
AAAGGTTAGCCTCTGAAAGGGAAGACTGACCAGAGAGATGAGAGAACTTTCTAGGGAGATGGAAATGTTCTGTATCATA
AGGATGTGGGTTACATCTTTTTTTTTGTTTTGTTTTGTTTTGTTTTGAGACAGAGTCTCGCTCTGTTACCCAGGCTGGAGTGC
AGTGGCGCCCTCTCTGCTCACTGCAACCTCCGCCTCTCAGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTG
GGACTATAGGCGTGTGCCACCATGCTAGGCGAATTTTTTTGTTTTTTAGTAGAGATGGGGTTTTACCCTGTTAGCCAGG
ATGGTCTTGATCTCCTGACCTTGTGATCGCCTCCCAAAATGCTGGGATTACAGGCATGAGTGCCCGGCCGCTTACATC
TTTTTAAGTATTTTAAGTAAATTTGGTAGTCAGTGTTTCAGGAATCCTTCTAATGACTCTTCAACAGGGGTGGCTTATGAA
ATAGTTCATCAATTTTTTTTTCTGATAAGGGGAGGTTGAGGCAGGAGGATTGCTTGAACCTTGGGGGGGAGAGGTTTCA
GTGAGCCGAGATCATAACACTTCACTCTAGCGTGGGTGAAAGAGTGAAACTGTCTCAAAAAAAAAGGGGGGAATTTAC
ACTCTTGAAAAATAAATATTTTATAAGGAACTTTAGAGTTCTCCAATATACATGATCAACAAGGACCTGTTACCATTT
TGGACCATGTGATAATAGAGAGGAGATAGTTCAAAAATTAGTCATATGTTCCAACAACAACATGATTATGGAACTAGTC
TTAGAATTGAGAGTAATTGAAGTTTTTGTGTTTTACTGGTATTAATAAATGGTATTACTCAATTCGTTGACAGTACCAGT
CTCTGCAATATCTTTTGTGTTGGGGAAGGGGAGAGGACCTGTTCTGCTCAATTAGAAAACACATCTACATTTTAAAGAATAAA
ATATTTTACATATACCTTTTGTATTATAATCTGCAAACTCTAGAATTGGAAGAAATAGCCTTCAATACTCTTCACTGCA
AAAGTTATGAATGTTTGTATAGAATTAATTAAGCATTCACTAGTAATTAGACTTGTTTGGGAAGGACTGTAGGATCTTTGG
CAAGAAGTGTGTTTTATATTGTTTTCAGATGTATACCATTTTCTCTTAAGGTTTACAAGTTAATCAATAAGATTCTTGG
CAGAGCTAAGTACAAAAGAACAATATGTATTTTCGCAATACCAATGGATCTAAGTCTTAAGTGTTATTTGATGTCCTCGAA
ATGTTTGGCTTTCAACTTTGTTTAAATGAATAGTGTGTATACAGTGAAGACAGGCTTTACTTAGCCATGCCTAGACCCCT
CTGTGGATTCTCTCATAATCCTCAGTTATTGTAAACCATACTTAGTGAGACCAAAAAGGATATTTGTTTTGGCTGCATG
GTATTATTGGAACCGGTAAAAATTTATTCTTTAAATAATGTGTTTTTCTATTCAAAAAAATATGTCTATAGAGATA
GTTATTTCAAATGTAGTTTTCAATATGCACCTGTGGGTATGAACATGAACAAACACATGCAGACACAGAGTCTGAC
GTTATATCTAGAATGTTGAATCCTACTTTTCTACTTAACAGGAATGTTTCCCTATGTAACGAAAAAGTCTGTATAATGT
GTCTCTATTATGTGATTATATGAATTATATATCTAATTTACTTAACCATTCTTTTATTGTATTGGTCAATTTCCCAT
ATTGCATACAAATTATTAGGGAACATCTGTGTGCAACATTTTTATTATACATTTTGGATTATTTACTTAGAATAGATTCT
CCGGAAGTGAACTACCAGGTCAAAGGCTTTTCCCAATTTATTTTTCAAAAAGAAATTTCCCACTGTATTCTATACAAGT
ATGCTTGTCTCACTGCCAGTTGCTAGCCTTACATGGTTTTTTTTTAAATTTGTTTTTATAAATAGAATCTCATTGT
TTTAGTTTGTATCTTTTGGATTACTAGTGAGTTTGAAATTTAAAAACCTGTCTTTTTCAGGCCTTTGTCTTTTAGGGTTT
TTAGGATTTTCTTAACGATTAGCATCATCTCTTCTCTAAAAACGTTATATTTGTTTCTGTTATATTGTAATAGGTTTTTTT
TTGCTTTTAGCTATTAAGCTTTTAAATTATATACCTTGATTTTAAATTTAGAAAAGTAAAATTTTCTTCAATGGAGTTCTT
TTTTAAATTGAATTTCTTGACATTTTATTATTTTGTTCAAAGAACCCTATGGGCAAGTGGAATCTTACACTTTTATTA
CCTGGATAGCGGATAACATTCAAGTTTGTATTTAATCTGTAGCATATAGTTGACTTTTTATTTTGGAAATATCCTTGC
TTTAAACTACAACCTAAAGGAAGGCAGATGGTTAGCTTGTCTTCTCATTTCCTGAAAATGTCCAAGATTGGAACCAATA
TTATCAGTCTGTAATGGAGGTTGGCAATGTCAAGATGGTTGTATCCATGTCAAGATGTTGAATCAGTGTCCAGGTCAT
TGCTCATTAAGATGTTGCTCTTTGGATAAACCAGGAAACCAGAAAAAGATTCTAACAATTTTGTATGCTACCTCACA
TTCTTTCGAGACAGTGCAGAACATTTCTGTTCTTTTAGAAAAATTTACAGGTCTCTTCTTTGTGTTACAGCACTTACTATT
TGCTATTTGTATTATTGGCTTGTGACCCTTTTTTGGGGGGTTACAAATACACTAGGGGAAAGAGTATTTTTAAAAATC
ATTATGCCTTTGCTTTATCTATGTCTGTATACCTCTCCTATTGTTATTATTTATTTTATTTTGTAGACAGGGTCTCACT
CTGATTCCTAGGCTGCAGTGCAGTGGTGCAATCACAGCTCACTGCAGCCTCCATTTCCCAAGCTCAGGTGATTCTCC
CACCTCAGCCTCCTGAGTAGCTGGGACCACAGGTGTGCGCCACCATGCACAGCTAACTTTTTTGTATTTTAGGAAAT
GGGATTTCACTATGTTGCCAGGCTGGTCTCAAACCTCTAAGCTCAAGCAATCTGCCACCCTCGGCCCTCTAAAGTGCT
TGGATTACAGGTGTGAGCCACCCTCCCTGCCTCCTATGTATTATTCTATATGTATTTTTTCATATTAAATGTATAAGTT
TTTTCAAGTATGGGTATTCCATTTGAACAAACCATTAAATCTCTGCTCGTCTATAGTCATTTCTTATTAGATGTGTCA
GTTCTTAATTTTATCACACATTAATTTCTTTTTTTGTTTCTTATACATTTTGTTCCTTGAGATCTTCAGAATGTAAAT
CAATCTCCATTCTGTTATGATTTATAATCATTTACTTCTCAGATGATTCTCTCTTCTTGTGCTTTGTGCTTCTGTTATA
TTCTTATTACTTTTGTATCTTTTATTGTTCTAATTTACCTCTTCTCAACCCATCCCCACACTGGCAACTGTTATATGAA
TGGCTGGTCAGATGGAATCCACATATGTTCCGTATGCATGTATAGATTTTACTCAAGCCACTAGTGGAGACACTATTCC
TACTTACACATATGAGTACCAACCTCTCTGTGATGCAGCAATCATATCTTGACATATCTAGAAAAGTTTCATCCTCATCC
ATAAATTACTTTCATCTTTCTCAAATAACTCAGGGAATTTTACATTAACCTACCCAATTTAACAATTTAGGAAAAATCA
ATTCAAGTACATGAGGTAAGATGCGCTGTCAAATTTGCAGTGTCTCTAAGGTGATTCTTTTTTGACCAGACTAGAAAC
ACTAATCTGGCACTATTTTAGTTGGGGTTTCTGTTACCTTTCCATGCCATAAAAAATCTCTATAAAACAGAACAAATG
CACATTTAATTATAGTTTCAAAAATTTGCATTTCTGGATGAAACTTTTTCTCTTGTCCCCTCTTGCCATAATTGCTAC
ATTGTCTACTGTTAATTTGCATTTTAACTGAGCTTTAAACATTTAACCAGAGGATGGTCCAATCGGAGATTCTATAACC
ATCTCAGTAATTGGTAGGCAAGTTATTTTTTATTGCTATTTCAGCAGTAGGGAAGTCTCCTCTACAGGGGTGGGGAAAG
AGTTGATAACCTTCAAAACAGACTCTTTACTTTGGGGCTGTGATGAGAGAAACAGAAACAGAAAGTTAGGAATGGTGAAT
TAGAAGAGACAGATGGTGAGAGATTATCATGATTTATAGGATCACCCAAATGTCTAAAATTTACTCCAGAACTTTTTTA
CCAGTTAGGGCAAAATGTCATGCTTATTTTGGCTCCTATAGATACATTTAAATCAGACATACTGGACTTTGCATTCTG
TTATTTTTTTTGGGGGGGTGATATTTAAGGAGTTCTAGAAACAGCCTACATTAGACTTAGTGTTTCCAGCAACTAACAA
ATTTAAATGTTATAAACATTTTTCTAACGCATTTTCTTTAAACACTCTGGGGAAAGACATGAATGTAAGATGACTGA

Fig. 6. (72)

78/375

TTCTCAGATTATCTGCTTTTAGAACAACTTCTTTTAGCTGCAAAAACGTAGTGACGGTGTCTCAATGTGAGACGGGG
AAGATTTTAGTGGGCACAGCAGCTGTTGACTCAAATATAGTTATACATGTTCTTCTGTGTTTTCTTGTAGGTGAATCA
GCAGTTTAGTTTATTATGAAAATTAGCAATCTATAAGATGATTCTGAAAAATGAATTCAGAAAATTAAGGTACACAC
ATGGCATGATTTGGTGAATATGAAGTGCTGAAGTGAAATACTCATATCCCATTGTGATCATTGATGTTCTTGTGCAAT
TATGGTCATCATGTCAAGAACAAAATCAATTTGATGCGATTGAAAAATAACAAAAATGCTTTATGTCTTTTAGAGAAAAT
ATAAATGATTTCATTGTAAATGAGAAACCTCAAACCTGAAAGCACATAAAAAATACCAGGTATGAGTGTGTCATTTGAAGTC
TCTGACTACATGAGAGTTGTCTGTGAAATAAAATATCCAGTTACACAAAAATATTCTTTATAGTTAAAAAACTTTTTTC
ATACATATCACTAGTTAACTATTTTTTAGTCCCATTCTTTCTATGTGCCCAGCAGTGAGCTAAAAGCTGTGCATTTAATG
CATTCTTCATTGTATTTTTGTTTTGTTTTATTTTTGTTATTTGTAAAGATGGGAAAGACCAAATGAAAAGATGTCAAAC
TTTCTGGGGGTGGAGAGGACATTTGCATTTTGAATTTAGAAACCTAAATTAGAGGTTTAGGAAGACTCATAAATATGTA
GCAGAGGTTTGGTGGTACAGCTAGAAGCTGACCACCACCATGGGGCAAATAATGATTTAACCTCCTCCTGTAAGTATT
TGATGTAAGATCATCGGTATATTTTCATCTGTGACATTATCCAAGAAGAAGATGAATCTGAGGGAAACAATGCTTGCA
TTTGAGGGGGAAAAATGCTTGGAGTAGTTAGTCTCGGGATAGCCCTAGGTGATGATAATCCTTGACACAAACACAGCACA
CTGTTAGAACAGACAAAAGTCTGCGAGGTTAAGAAGACCCTTGTTACATTGGAATCTTTCAATCACTTCTAGAAATAT
GATTTAGTTAAATCAATATTTTTATTTAGCTCTAGGTACAATATTGATGCTAAAGAAGTTCTTGTGTAACCAACAAATGG
ATGCTCCTTTAAATGCTGGAGGCATCATAAATGGCATGTTAGCATCAGGTACCTCCCTCTTGGAGCTTACACATAAAA
ACAAATGTACACAAATAGCAATAATCAAAATAAAATATTTAGGGGATTGTGTCAAATGAGAGCTAGTGACAACCTGTTGATT
TAAAGATTGAGCCATTTCAAAGTTTGAAGTTTTAGGATATAAACTAAAGAGTCCAGAGAAAGCAGGGAAAGTATAA
ACTATTTCTGCCAAGGATGGGGATTTTGAAGGCAAGGTTGGATATTGCTATTAGGAAGAAGTGGCATTGTAGCTGGGTAG
GATTTTTACATTGAGAAATGTGAATAGGCACGTGTAGAGAAAAAGGAGGAGGATTCTGGATTGAGGGAAATTTATTAA
TTCTTCATTCTACATTTGCTGATTACTTCTATATACAAGATACTAAACTAAGTGCAAGGCACACAGGGTAAATAAGAA
TTTTAGTTCTTGTCTTTGAAGAGCCTTCCCGCAGTAGAGGAAACACGTACTTACAAGAGGCAAGCAATGGTGCCCTAAG
GCCTGAAGGGGGCGCTCTCTACACAGCAATACGAGGGTGGAGTTTATTTTCATGGCACCTCAACCCATCTGACAGCT
AGGGGAGCTGCATTTTCCAACAGAAGGTGCATTTTGTATATTTGTAGGCTGTTTTATACACTGCTTTGTGCTGAAGTTA
TTCAGGCATTTCTCTTCCCTCTAGACCTTAAGTTTATGGAGGCCACAAGCTAGGTTTTACCATTTTGTATCCGTCTGT
GCTGTCTAGAGTAGTGCTTGGACACACAGTAAGGATTAAAGACTTTCCGAATATAATTAATTTTGTCTTTTAGGGGA
AATAAATATATCTCATAGAAGGCATGGTTGTCTTCTTCTCATCTAGTCTTTCAAAGTCTTTACAGTGTGTTGTGTTG
CAGAGGCCAACAGTAGTTAATACGTGTGTTGAAGCCATACCTTTTACTACTTGATGTTATTTTTGAACAATGAAAACCTTTG
CAGGAAGTTCTCATCCCTTTGTGGCTAAGATATTTTCCATTAAGGGGAAACAAAAGAGAAACATTAGCAAGCTACTC
ATTTATTTCTTTTAAAGTTACTTGTAGAAAGTCACCTTTTACCCCAATTTTACATTGAATTTAAGTTCACTTCTACCT
ATCTGACAGTAAGTCAATATTTCTGAGATTGTTTCCGAGGCTTCTTATTTTTCTCAGCTGTAAACTGAATTACCTTTTA
AACGATTTTCTAGCTAACAGTAAATGGTCCATAAAACATATGAATAAAATGAAGGCAAACATTTTATGCTTAAATAGC
TATAATGGTAGTCCGTGTAATGGGCTGGAGTTTCAAAAATAACCAGTGATGAATCTCTTAGCGGCCACATCATATTATC
TGTGGTTTTTGCAGAAGTGTCAATTTGCAGCTATTCTGACACACATCTTACTCTAGTTGGCAATTTATGATGTTTTATTC
TATGTAAACAAATGTCTGTCTATCTTTAGAGTACAAATATCTACGGAGATCAAATGTAAGAAAAAGTGGCCCTGACTT
GGTTTTCAATTGTTGTCAAAAATGGTCTTTAAGAATGTTGTTTTCTTTTAGACAATATTACTTAAGTATCTACAATGGCTT
GTTGTATTTTATGGGAATGGTATTACTTTACAGCTTCTGCCAGGGTATGATCAATCTTCTCTCTCACTAAGGAAACAG
ACAAATCTGCTATTTCTTAAACAGTTTTTTGTGGCACTTATAAGAATTTATCATGTTTCCCGGGTGTGTTGTGACAGACT
GAGGATAGCTATGCCTGAATTCATGGTGACGGTAAAGAGAACGTGTAGTGTAAACGGGCGTCTGTTTGCCTGAAGTT
GTCCAATCAAATGTCTTCATTGATACCAGCTATTTTCTTAAAGCTCTGTATTTGCTCAGAGGCATGAAATGTTCTT
TCCCTTTCTTGTGCACTCTGAAACATTTTGAATGCTTTTCAAATCTTGAAATCTGGTGATGCTTTGAAACAGTT
TTATAAACATGCAACCCACTCATGTGATCTGCTGGGTTTTCGTTGAAACTGCCACTCACATGCCAGGTTTGTACAAA
TAGACCTGAAAGGAATCTCAAGGTCAATTTATTGCAATCCATATTTGATGAATTTGGGAAGTTGTGGGCACACCGTCA
CTCTGTGAACCTGTAGCAGGGAGCTGAGGCTGGTAAGGTAGTATCTCTTTATTTTCACTTTAGTAGTGTATATTACACA
CATAGCTTTTTCTTCTTAGGGTAGAAGTCTTCTCTGCTAACCTTTGATTTTTTTGAAATTTCAATTTTTTAATCTTCA
ACTCCCAACAGATTCTGTTGTTTTCTTCCCTGTAATTTTTTATTTATATCTGTGTGTTTTGATTAAGGTTACTTTCTA
GTTGTAATGGGGAGCATTAGGCAGGTTTTTTTTTGTGTTCTTTTCTAAATAATCAGGACTTTACACAAAGTTACAA
GCTCAATAAGCAACAGCCGAATCTTATTCTACATATTTTTCAGCAGAGTGCCTTATCAGACACTATGCTCTCTTAAA
GTCTGCACACCAATGTCTATGACATTCTAGACAGCTATTCTTTAGTACACCTTTGTACTTCAGGTCCCTTTGTGGCGG
TGATGTTTGGCAGGAATCCAAAATCTGTTAATGACTGTTGTACTTGTCTATTATATTATATCATATAATTATTATGTAG
ACTGATGTAACATATAAGTAAAGAGAAGTGTATGTGAAACTAAATAGAAATGCTAGTAAATTTGCTAAAAAAATTAC
TGTAGAATTAGATGTAGGTGAGCCAATCATAAAGATTGGGAGGAAATGTGAATGATTCTTAGATTGCTTCTCAAGTGC
CTTAACCTCTCAATTACAAAGAAACACTGTAAGCCATAGATGCATAATGGATGTTCTTGATGTAAGACATTGTAGA
AATCTAACTAAGAGATTCAAACCTCAAAGCAAAGGCCTTGGCTCTACATCAAAGAGTAGCCAACTATGTGCATTTAAGT
GTTGCCATTTATAAAGAATACTTGAGGTATTATTTCTGAAGATTCTTGACTTTAATATATTCAATTTAACTGGCCA
ACTACCTATCCTGAATATGTCTATATGAGAGGGCTTCAACATGAGAATAAATCAAGCCTCTAGCTGTTCTCTATTTT
AAAGTGGGGATGAAAGGTGAACAAAGTGTACAGATTCTCACTATTGTAGTATCTAATAGTATGGGGAGGCTGTCTG
TTGCCTTAGTTGCTCTGGAGAAATATCATCGGGGCTCTTTTCTGTGATGTCAGCTCATGGCAGAGTACACCACTGTCT
CCTAAACTTTTAGCTAAAAGCAGATAACACACTTCTTTTCTATATAATGCATTTGTATCTGAATTAGGACTTTAGTGTT
ACGGTTAAGACCTACAGGCATTGATTACTTTGGGGTGAAGTCTGGTGACCAAAGACAGTGTTCCTAAAAAGTGCAACTT

Fig. 6. 33

79/375

[illegible]

Fig. 6.74

80/375

ATGGTAAGCAAAAACATTCTTAACAAAAGCATGCTTTCTATAATTAAAGGACCAGAGAGGGTCAACCTAACAAGACAAA
ACTTTTAGATAATAACCACCATATTCCAGGTAAATAACAGAAAAAGCATTGTGGACCCAGTCACATCTATACCTGCAAAA
AGCCATGTCGGGAGCTTAGGTTTTTACTTTTTTGTAGATTCTGTAGTAAGTACCCCAATGTCCACACTGGGATAGTGTGAG
AAAAGGCAAGGAGGGAACCAGGAGTTTTATCATCACTGAGCTCCATTCTATTCTCAGTGTGAGTGGAGACCACATGGT
AATTCTGGACTTCCAAAGCCATCTGGAAGTAATAGGGTGCTCTTTCTCTCTGACTGGGCTGGTGTCCGTGGAGGCCT
AGACAATATTTCAGGACCTTCACCACTGCCCTATGATAACAAGGCCACCCTCATTACAGTGTTCCAACTGGGAGTTGGAA
CTCCTAGAAATTCTCACCTTCACCCAGCAGTAATAAGGAGCCTCTTCTAAGATGCTGAATGGGGAATCTGGGCTTTGCA
TCCATGTGGAAATCATGAGGCAGTACCACCTGCCCTTCACCTGCCAGAGAAGTGTGAGAGAAAGCAATTAACAGAA
AGATTTAAATAAGAAATGGCATCTCTTAACATAATTTAAAAATGAACAGGTTTTAATAAATTATTCTTATACCAAGAAC
TAGATCTCAAAATGAAGGAAAATTGCAATTAATAGATACCAACTGAGATGACAGAGGTGTTAGAGTTATTTGACAAC
AGTTTTAAATAAGTCAATGATAAAAAACGCTTCAATGAGCAAATCTGAACACCTTTAGAATGAATGAAAAAGTAGAGAACC
TGAACAAGGAAAAGAGAAGCCCTCAGCAAGAAATAAAAGAGAAAAAGATGAGCCACGTGGAGTTTTAGAACTGAAAAAT
ACAATAACTAAAAAGAAAAAGCTTAGTGGATGGGCAGAAATACAGGAGATAAAAAATAATAAATGGAAGACAGAAATTA
CCTAGCCTAAACAACAGAAAAAAATAAATGGGAAAAACAAAACAAAACAAAGAGCCTAATGGGCCCATGTAATT
ATAACAAAAGATCTAGCATTCATGTCTCAGAGTACAGAAAGAGACGAGAAAGAGGGATGGGATGAAAACTACTTGAA
GAAGTAATGGTCCCAAACCTCCCAAATTTGGTAAACACATAAACCTTGAGTGAACCATAAACAGGATAAACCCAAAGAA
ATTCATACCATTTTATAATTAACCTTTCAAAAATGAAAGACACAAAGAAAATCTTGAAAGCAGCCAGAGAAAAATTATT
CCTTACTTATATAAGAAAATCAATGAAATGGCAGTAGATTTCTCATCAGAAACCATGGAGACCAGAAAGAAGTGACACA
CATTTTTTTTTATGTGCTGAAAGATAAGAATTGTGACCTATACTGAGTGAAGAACCCCTCTTTAGGAATGAAGAGGAAA
TCAAGACATACTTAGATAAAAAAGATTATCACCAAGGAGATCTGCTGTAAAGAAATGGCTAAAGGAAGTTAGCTAAGCA
GAAAGGAAGTAACATAAAAAAGGAACCTTGGAACATCAGGGAGGACAAAAGAACATGGTAAAGCAAAAATATGTATAAATA
CCATAGACTTTCTCTCTGAGTTTTCTAAATATGTTTGATGGTTGACAAAAATTATAACATTTCTGGTGTGGTTC
TAAGTGTATGTAGAGAAAATATTTAAGGGAATTATAAGTGTGGAGGGTTAAAGGGACGTTCAAAGAGGTAAAGGTTTCTA
TACTTCACTTTAAGTGATAAAATGACAAAACCAATAGACTTTGATACATTAACAAATATGATGTAATACCTAGAGCAG
CTACTAAAAAGTTGTACAAAACAAAAGTAAAAACAGTAGAGTTAAGCCCTAGCATACCAATTATTGCAGTAGCTGTAAA
TAGTCCAAATGCACCAATTAAAAAACAGATTGTTACCTTTTTTGTGGTAAGAAAGACATAAAATCTATTCTCTTAGCAA
AATTTCACTATATGATGTAATATTATGAACTCCAGCCCTCATGCTAGTACATTACATCTCTAGAATTTCTTATCCTATA
TAACTGCATTATGCTATGGTACACAGGATGGTTTTCTTGATTTCTTGTTTGGATAGATCATTATTGGTGTAAAGAAATG
CAAATGCTGGTATGTTGGTTGTGATTCTGCAGCCTTACTGAATTCATTTATTAATTCTAACAGATTTTTTGTGGAATTT
TGTATCATGTAATCTGCAACTAGGAATAATTTTACTTCTTCTTTTTTGATATGGATATATTTTTAAATCTGTTTCTCT
CTAGATGCTTTTGCTAGAATTTTCACTATTATGTTGACTAGAAGTGGCGAGAGTGAGGATCCTTGCTGTACTGGCTT
TTAGAGGAAAATCCGCTTTTCCCATTTGGATATGCTAATTTTCTTTTGTGTTGACTGTAGTAATCATTTTATTATGTATA
TGTATATAAAATATTGTTTTATATACCTTAAATGTATACAATTAATAAATAAAGGCACATGATGTAAAGGAAA
AAACAAACAGAAAGAACTTAAAGCAAAACAAAGCAAAAAACAAAGACTGGCATTATGGAATAAAAAATATGACCTAACT
ATATGCTGTCTAGAAGCAACTCACTTCAAATATAATGATATAGGCAAGTTCAAATTAAGGATAAAAAATGTATATCA
TATAAATATTAAATCACAGAAAAGCAGAAATAGTTATACTATCTGATAAGGTAGACCTCAGAGCAAAAAAATACTAG
TGACAAAGAGGTACATTATAAAATGGTGTATAAAGAAAACTTTAGACAAATTAATTTAAACAAGTTTAATCAAGCTAA
GAATGATTCGCAAAATTAACAACCCCAAGCAGAAATAGATTAGAGCAACTCTGGCACTGCTGTGTAGTCAGAGAGA
ATTTGTGGAAAGAAAAAGAAAGTGTATGATACAGAAAAATAGAAATGGGATACTGAAACACCTGGATTGGTTACAGCTGGG
TGCTTTATTTGAACAAGGTTTGAGTAGTTGGCTGTCTGTGATGCTTAAAGTATGGCTGCTGTGATTGGCTGAGACTCTG
CTACTTACAAGAGTAGGTTGCTGTCTATTTACACACCCTGTTAGGTTACAGTTCACTATATACATATAAACCATCAGGC
CTAACTTAAATGTGTAAGGAGTCAGCTTTAGGCAAGTTTAATTAGGCATGGTAAAGGGTCACTTCACCAAGAAAATT
TAGCAATCTTAAATGCATATGCAGACAACAGAGCTGAAAATATCCAAGCAAAACCTGATGGAATGAAAGGAGAAATAG
ACAAATCTTCAATTACAGTTAAGACTCCAGCCCTTCTTTCTCAACAATTGATAGAACAACTAGGCTATAAGTCATCCAG
GATATAGAAAACTCAGCACCATCAACCAACTGGATCTAATCAACACTTAGAGAACATTCCTTTCAATAACAGCAAAAT
ACACATTTTCCCCAAGTGTCTATAGAATTTATAACAATACAGATGATTAGGCCATGTAAAGAACCTCAACCAATTTCAA
AACAAATTAATCATACAGAGTGTGTTGTTCTTTGACCACAGTGGAAATCAAACCAGAAATCAATAAGAGAAAGATAATAGA
AAAATCTGTAAACATTTAGAACTAAACAACAACAGACTTCTAAAAATCCATGGATTAAAGAGAACTCTCAAGGGGAAA
TAAAAAAGGTTAAGCTTAACAAAAGTACAAATGCACTATAAAATTTGTGGGACACAATAAGCCATGCCAAGAAAAA
AATGTATAGTACCAAATACATACATTAAAAAAGAGAAAAAGACTCCATCAATAACCTAACTTTTACCTCAAGAACCTA
GAAAAAAGAGGTAATTAACCCAAAGCACACAGAAAGAAAGAAATGGTTTTGTAGGCTGACTGGGGAAAAATAATT
TATACAACCTTGCTTCTGTTAAAAAATACATGAGTTCAAAAAACACATTGTGGCCTTCAAATGCCAATACCTTAT
TAAATTACCAGAAATTAATTAATAAATTGATTGATGGTTACTGTAATGATTAAGATAATGGTTACTTGTGGTGACCT
TTTTTCCAATCATAACCAACATATCTCTGGAATGAGTCACTAAGGATGATGCAGCATCTTTCTTTCTCTTTTGATTA
ATCAAAATTAATTAATATATTTTATCTTATATTAAGAACAGTTTAGTCATGAATTTAAGCTGGTGTAGAGGATAG
CTAAGTTGCTTCTCATAGTCATTTTCTTACTTATGTAATGAAGAGCAGAAAAATATTTTTACCAGTGGTTCTCAACCTT
GGCTGGAAATCAGAACTCACTTAGGGAGCTTAAAAATATACTGATGCCTGGGTCCCATCCAGCGAGATTCTGAATTGTTT
TATGGCAGAAATCTCAAATAACAGTATTAGCCTCTCAGCAGCAGCAGCAGCACTTGAAACTTGTAGAAATGCAAAAT
TCACAAGCCCCATCCCTGATCTAGCAATCTCTGTTTTAAACAACCTCTTCAAGTGATTCTGAGGCAGCAGGTCTCAAGCT
TTAATGTGCATGCACATCTCCAGGGAATCTTAGGAAAATACAGATTTTAATTTGTGGTCTGGATATTACACACTGTCA

81/375

CAGATGCTAATACTGCTGGTAGCAAAAATATAATTTGAATTACAAGGGTCCATAGGACATCTGGATATTTGCAATTTTAA
AAAATTTTCCAAGTGGGAATGCAGCCAAGGTGAAAACACTGGTCTAGATAGCTTTATGGTACACTGCCAATAGCCCAA
GCAATCTGAATGATCTCTGCTTGGTTTTCTGTACCTGAGGTTGTAGAGTCACTGAAGAGCACATACTTCTTGTCTCTT
TAAAGTGATAATCCGGCTGGACATGGTGGCTCATGCCTGTGATCCAGCACTTTGGGAGGCTGAGGCGGGTGGATCACT
TGAGGTCAAGGATTTCATGACCAGCCTGGCCAACATGGTGAACCTGTCTCTACTGAAAATACAAAATTAGCTGGGCG
TGGTGGCACATGCCGTAATCTCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCGGGAGGTGGAAATTGC
AGTGAGTCGAGATTGCACCACTGCACCTCTGCACTCCAGCCTGGGTAGCAGAGCAAGACTCCGTCTCAAAACAACAACA
CAACAACAACAACAACAACGACAAGAACCAACAACAATAACAACAATAAAAACCTAAAGTGATGATCACTGATTTTAAG
TGGCTCCTTAGTTGCTTAAGAATCCCAGTTGTGATGGTTTTATCCCTTATTGTCTAGAACTAATGTTGAACACCCTGCT
TTTTAACTTCATCTTGTTTTTCTCTACCCCCATCATATATTTGCCTGACTCACCATCTTTCAAGGTTTACCTCTTCA
TACTCAGCTAAAAATTAGCTGATGAGATGCACAAATAATTCAGTGTATCAGGAGAGGATCAGCTTCTCTCTTTTAAAG
GTAACATGGATCCTTTCACCATCTCTGATGCCCTGAGACCAATGTCTTGAGAGCATCACATCTTGTTCATGCATTCT
GACTGGGCATGCTCATCTATTCCAGTGTTCCTCAAGAACACTCATGTATTGATCACTCCGTGGCCAGGCCAGATCTCTC
TCTGGCTTGTCACTGAGTGGACATTTTTTTTTTGTATTTCTCAAAGTCACCTCAAATTCAGTGTGCCAGACTAGAATC
ATCTTCCCTACCATGTCTGCGTCTCTCTCTGCACTCTCTGTTTCAGTGATAAGTAACTTGGGGGGCATTTTTGATTCTC
CTTCCCTCTTTTTCCACCCCAATGGAACCTGTGTGTTAGGATCTGTGGATTCTATCACTCTTGATTCCACCTACTTTTCA
CCATTTTGCTCTACTTCTCTGGTGCAGGTCTTCCACCATCTCTTGCTTAATTGCTGCTACAGTGTCTTAATTTTCC
CTGCCTTTAGTCTGTCTGTCCATCTCTAATCCACTTCCATATGGCAGTGAGAATGTTTTATCTTGCCACTTCTTAGAT
CTAAACTCTTTAGTAGCTCTCCATTGCTCTCAGAAATGTAGAGTCTCTTATTATGACTTAAAAATTATTAATTATCTGGT
GCTTGCTCACCTTCCAAGGATCTTCTTTTACCTTGAACCTGGATGCAATTTTCCGTATGTACCATTTTCTCTGTAGGTTT
TAAGCCTTTGAAGAGGTGATGCCTCTGCTTGGAGTGTCTTTCCATTCTCCCATTTGCTTCTTATTCTTTTTTTAT
TTGCTAAGACACTACCTCTGAATAGATGACTTCTTGACCCTGCCTCTCTCAAGGGTGAAGTTACATGCCCTCTCTTAT
CCTTAGTGTTAAATTACCACACTGACCTTCAGTTCCTCTTTACTTGTATTATCTTCTCAGTAGCTCTCTTAAGAGGG
ATTATCTTCTTCACTCTGCCCTTAGCATCAAGCCTGATGTCTCTATTATAGTCTGTGCTAAATAATTATTAATAACAA
AATACCCAGTTAGTGTAAGGAAAGGAACCTGCCATGGTAAATAAGTGTGAGAGAGGTTTTGAGGTAGTCGTATAACTGT
TAGAAATACACAAATCACATTATAGATAGTGGCTTCTGTGTTATCACAGTGTCTGATTTCTTGTTCAGGATATTTAG
AAAAAGTATACCTAAATAAGCGGAGAAGTCATTAGGTTGAATGACATATTCCTTCTGCGGAGGTATTATAATATAAT
TTTTAAAGGGCCTCAGTTAACAATTAAATTTCTTTATATCCTTGCAGCAGTTCTTTTTTTCTAGGTTTCATTTCTTCCA
GAACTAGATGAGGATTTTTGTCTAACTGATACAATTCACGTTCTGAGTCTTGCCTTCTCTCTCTTTTCAGTTTCTGGG
TTGTATGTGGTAGATTGCCAGTCTATACCTAATCAGCACTAGGTTGGAGAAGAATAAACTGCCTTCATGTTGTGGAGC
TGGCAGTCTTCTCTGTTGAGTGATAAAACCAATGCCATTCTAAAGATCTGCAGACCTGTGTGATCTCTTCTTCGAGGGA
GCTGTAAGAACAATTTGATGGAAACACCAGTTTTAAAGATTGCAGTTCAATTCCTACATGCATATTTGCCTAGGGA
AATTTTGTAACTCAACTGAAGTTTACTAAATGAACAGCAAATGAATAAGTATACGGGTTGATGACAAACACTCCAGCC
CAACATCTCTAGGGCCTTTGCCAATGTTTCACTAGAATTTGGACCCTCAAGGTCACTTAGTTTTACCATGTTCTCTCT
GATTTGTGTTGTATGGGGTCACTCTCTTTAGCAATCTGCAGAGCATAATTTAATGCTGTCTCCAGGTGGAGGGTTGA
TGATCCCTTTATAGACCACATTTCTAGCACAAATTAATGTCACTGTTTCTTCTGTAGGAGGAGCCTGGCACACTGAATAC
CAGTGGAGTCTTGTCTCTTAGGCTTATCTTGGGAGCTAGTATGCTTATTCTTGTCTTCTGCTCCCTTCTTATGCACTGC
CACAAAGGAATTGCTCTAGAATCCATTTCTTCTCTCATCTCTCCGTTTCTTTGAATCTTATTTTGAAAGTTCAAG
CTTCATTTCTGCAATTAGGGAATAGATCATGGTCTCTAGGTGCTTTGTCACTTCTCAATACTGTGTGCCATTTTGA
ATTACTTCATGTTCTTTTGGAGCAGAGGTTGTATCTTTTACTTTATATGGAAGATAGGCTTAGTGCAGCGTGTAAC
CAGACTAAGGCAATTTAAATGCTGTATTTTCAATTTGAAATGACACATGGAGCTGTTTTTACCACATTTCTCACTGTCTTA
TCTGAAAACAGATTAGCGCAGGGAAGTCTTGGAGCTATTTAAACCTTCTCTCATATTTTCTCTGGCTTTCAGAATGA
CTATATAGGGCCTTTTCTTTGGTGGGGATTACACCTCACTGGCTCTCATGTAACCAGTCAATTTTCTCTCACTTATTA
TGGGACTGTGAAAGAAAGAATTAGAAGGTGAAATTTATAGGATTAATGTTAAAGGAATTAGTTAGCTTCTTTGTTCTCT
TAATTTCCAGTTACAAGAAAAGAATTAGATCAATTACATTTCTATGGGCTTGATCTCATGTAATAGTAGCTATTACCAA
CAAAAATATAACCAAATTGGACTTTTAAAGATGTTCAACAGCAGCATTTGTTTATAATGGCAAAACATTAGTATCAACACA
GGTGTCCAACCACAGGAAAACAGTTAGATAAAATGTAATTAATCCTTATGATAAAATGTGACCATTAAGTTGCTGTT
TTTGAAGAATTTTAAATGTGTGAAAATGTGAAAATGTGCTGATGGTATCATCAGCACCTAGTACCAGTGCTGGCATGT
GAAAACAGCTTCCAATAAATACATATGTAATAGCTTTATCATACCAGGAAAGGTGGCTATAGAAAATAATAGTAACCTC
GTACTAAAATGAAGAGAATCAACTTCTCTCTGCTAGATGGCCACTATCTGCATCTTTTATTCTCTTGAGTATTCTG
GAATCAGTAAAAATGGTGTGTTTTCAAGAATCTTATCAGAAATTCAGCTACATCTTTGCTTGGCAATCTGAAGTTTTTGG
AAAGAACGTATTTCAATAATAAGAATGACATAGAAATTTTACATGGTAAATATTTAAATAAAATATGACATTTTAAA
TTTAAGTCCAGGGTTACTGTTTCAGAGCTGAATTCAGACATCTGAATGATAAGCGGAGATTTTATTGAGAAAATCTCTA
CTTTATCATTTCTACTGGCTTTACTATGTCTAGGAGCTCAAAATGTCTCACTGAATTTAGTTTTCTAGCTGACTTCC
TCTGTTGGTGTGTTTTATATGTTAGTGACATTTGATTTCTGGACTTTTCTTTTTTCCATAGGCTTACCTCATTATTTGA
AATAGAATTGATTAATAAATACCTATAGAAATAAAAAGCAAAATAAAACAATAGAGATAAAGATGAAATATGTGGTATAA
TTTTTAAATAATACCATTCTAGGTATATAGTCATAATTATGAAATATTATTCTGGTCTGAATGATAACAATCTCAGC
TTTTATGCTTTAGAAGATATCATTATTAATAACTAATTTATTAGATTTGAACATTCAAGAGCAAGAGATGTTACACCA
ACGGGTTCCCTTGTCTCTACTTTCTAGTTTTATGTAAGTGAATGAGTACCCTAGATTATCAGTTGCTTTTTGGGGAT
ATGTTTTGTTATGATAAAAGAAGCAGTTCGATCATGACATTTGCAGTTATCTTTCTTGCACTGACCTTCTAGAAATGA

82/375

CTCTTCACCTTCCTATCTCTTTCCCTGTCTTGGTTCACTGGTATACCTATTCTTTCAATTGTGAAAGTAGAAAGTCAGCT
GACTCTTTGATTCTTCTGTCTCCCTCTGAACCACTGACTTATGGCAATTTCCCTTTAGCATGTGTTCCGTATCTGGACC
TTCATGTTCACTCTCACTGTCTCTCCCTGGTTCAAGTTCTCAGATAAAAAACCGTTTGCCTTTAGTCTTCCCAAGCCTT
TAGTCTTCCCCATTTCAATTCATCTCCTGTACTATCATAAGATAAATATTGATTGTTTGTCTTTTGTCTTCTGCTTCCAG
CTTTATTAAGATGTAAATGACAAATAAATATTGTGTATACTGATGGTATAAACGTGATGTTGTAATACATGTATACATT
GTGAAATGATTAAACCAAGCAAATCAATATATTTCATCATCTTACATATGTATAACTTTTTTGTGGTAAGAACATTTGAG
ATCTACTCTTTTAGCAGTTTTTAAGTGTCCAATACATTTTATTAATTGCAGTCACCATGGTGTACAATAGATCCCTAGT
TCTGGAGATTTTGCTATTTTCTTGCCCAAAAATTGTTAGTAGCTATTACCAACAAAAATATAACCAAATTGGTCTTTTA
AGAATGTTACAGCAGCATTGTTTATAATGGCAAAACATTAGTATCAACACAGGTGTCCAACCACAGGAAAACAGTTAG
ATAAAATGTAATTAAATCCCTATGATAAAATGTGACCATTAAAGTTGCTGTTTTTGAAGAATTTTTAATGTGTGAAAAT
GTGGAATGTAGCAGAGCCTAATACCATATAAATACAAAATACAAGAAACATTTATGTTGTTTTTGTATTTTTTGTAGA
CAGAGTCTTGCTCTGTTGCCCAGGCTGGAGTGCAGTGGCAGCATTTCCGGCTCACTGCAACCTCTGCCTCCCGGGTTCAA
GCGATTTCTCTACCTCGGCCTCCCGAGTAGCTGGGACTACAGGCATGTGCCACCACGCCCAGCTAATTTTTTAAATAT
TTTTAGTAGAGATGGGTTTCACCATGTTGGCCAGGCTGGTCTTGAACCTCCTGACTTCAGGTGATCCGCCCCGCTCGGCC
TCCCAAAGTGCTGGAATTACAGGTGTGAGCCACCGCGCCCGCCAAAGAAATATTTATGTATATATGAATGTTAGCAGTG
GTTATTTCTGAGTGGCTCAATAACAGCAGATTTTTCTTTTTGCCTACACTTTTTCAATTTTTCTACAATAAATTGCATTG
TTTTTATAATCAGAAAAACTTCCTCTAATGATTGGTATCTGTAAGAAAGCTTGTAAAGTTATTTAGTTTGTGTTCTTA
ATATATTTTGGATCATGGGCCCTCTTTGAGGATCTGACAAATGACATGGAACCTTCTCTCAGAAAAATGAACATCTGCCC
ATAGACACAAAATATGGCATAGAACTTCAGTAGGATTTTGGGCCCTCAGATCAAAGAGCTTTTTGATAGTAAGCACAAATG
CTCTCATTTAAGAGATGATGGTGGACCCAGAGGATCTGCCTGCTCTCCACAGGAGGCTGGGAGCAGAGGCAAACTAA
TTCTTAGTACTTTAAGCTTTTGCCCTGAACTAGGCTGTCCAGGAGACTTGAGATCACTTTGCAATGCCCTTCATTATG
TGCTACTGAGGTACCTCTGTAAAGTTGCTAAGCCTGTGAGGTAGCCGTCCACACCCGAAGAGGGTCTCCCTATGGTGG
TTACTAATGTTATTCTTTGTAGTAGTGCCAAAGCTTTTCTTTTGGTAAAGATAAGCTTTTATTGGAGAGACCTAGGGG
AGTGGCTTCTAAGTCAGTGGTGGGTCTTGAAGTAAGCAAAATATAAATGTGCGCTCCCATTAAGTATTTGTATCTAT
TACTTTCTTAAACATTTCTCTCAGATTTGATGATTTTGTGTGTAACAGGCATGATGAAGGCTTTTTTCTTGAGAATG
TTTGTCTTCTCCATCATCTGGCAGTTTTCTTATATGACCTTGACTATGGTGGTAACAGGAATGAGGCATCTGTCTGTC
TCTAGAATTTTTTATTGTGCTTGGTGCTGTAGCGGTTCTCTCTACCTGGTGCCTGCACAGCCTGCATGATTAGGGCTTG
GAAAGGTCTCATTTCTCTGGTTTTAAGTGATTTTGTCTTTTCATAGCCTTAAGTTAGCTAGTAAGTGAGGGAAAAGTA
CCACTACCAGCACCCAGAGCCAGCCTTTGACTGGGAATGAACGTGGAAGAGTGCCCTTTCTTTGTGCAAAAAGACAG
AGCGCCCTGTAAATCTTGCCACAGACAGCAGATTTTACAAATAAAGGAGAAGTGTTTTCTTTGGTGCAAAAAGACAG
CAAACACAGATCTGGAACAGCTGTCTGATACTTTTTTTGCAAGTTGTTAAGCCCTCTACAGTCTAATCTCTGTGGAGA
GCCCTGAATCAAAACAGAGGATTGAATCCCTGAATTGAGCAGAGGAATTGTGGAAGGTAAGGAAATGAACTTTTTTG
ATGCCTCCAAGTACCAGCACTGGCCAAGGTGCTTTTCATAGATGTAATATTGAATCCTAGGAAAACCTGTGAAGTAGGT
GGTGGTGGTCTTATTTTTACAGGTGAGGAACTGAAGCCCAAAGCGTATTTTGTGTAAGTATACAGTTAGAGACAAAAC
TGAGTATGTCTGCTTCCAGTCAAGCTCTTTCTCATCTATAACAAATAGGTTGTATGACAGCACATGGTTTTGAAGTGCT
CTAATTATCTTTTATGTGTATGTGTTTCAAATATTTTTATTTATATACTATGATCTCATTAATAAAATTAGAAAATACA
GAAAGATATAAACACACACACAAACCCTCACATGAAACAGTTCTACTCCAACCACAGCCGCTTGTAAGACCTGATAGATA
ATAACTGGCCCTGTGAAGATTTCTCTCTCTCTCATCTCTTTGCTTATATGCTGTTGTATATTTTCCAATCCTTTCC
TCCAATCATATTTCTAATGTAAATGTAAACGGAACACACGGACAGTTTACGTCTTATTCTATATGTATTGGCGATA
ACTTTTTGCATAGCGCTTATTCTGCACATAGTTTAGTGTTCCCCAGCTGTCTTCTATAAGATCTGCCTGATGAGAG
GAAAAGCAGAAAGAGCACCATAGTCCCTGAACAATCTGGGCAGAAACACATGGGTTTGGGATAATACACGTGCACCTTT
CTTCACTCCTCTACATCTGCTCAAGATGAAAATGGTTGGGACATTATCATTTTGTCCATAGCACAGGAGAACAATAGTTA
AGTCATTTGGTTGAGCCTGGAATGCAAGAGAAAATGTGTCTACTGACATTCTATTTCCACTTCCAGGATGACCTTGAGA
AGACAGAAAGATGGGTATAAATTGGGTGTCTTCTCTCTGCTCTCTTAGAAATAAACTCTTGAAACTTATTGACTAGATT
GTATATCCACCTAGAATTGGGCCAGAGTGAAGACTAATGCCTACAGTATGCACACCCATGTTTGGGTGCTGTGAGAGCT
CAGGAAACAGAAGCCTGGAGATTGCCTAGTCTCTGCCCCTTTGCAGATTACCAGCAAGCATCCTCTCAGGCACAGACTG
CCCAAGGGTGAAGCAGCAGCAGCCTGGAGAAGCTGCCAATGGTAATAGGATGCCAAGAAAGAAAGTGAGCAAATTAGA
AAGATGCCACCAGCACTTATCTATTTGGAACCAATCTTTTCTTTCTCTACAAAATTTTAGATTGCCAGACTCTTGA
ACTTCAAGGTTTCTCTCTTTTATAAAAATTTATATTAATAAAGTACTCTCATTCCACTATCTATGTCTCTCCAGAGCCTGC
TTTCATGGGGCTTTCCAATATCCTGCTGTGGGGAAGCAAACCTGTTTGCACCTTCTTGCAAGAGATTAACTTATTTAATC
AGTTTCCCTCTCTCTCTTTCTCCCTTGCAATTTACTGATGATAAGATTGTGTTTCAAGGTAGAAATTTGGCTGCCTGTTTG
AGTGACAACAGCGGACCCAGCCCTTGTAAATGTCTGCTCCTTCTTCCCGCTGCATCTAGTTTCTGCTTCTGCCAGGT
CTCAGCAAGCCCTGTGAGGCAAAGCACCTTCTTCTTCTACTGTGGACAGCTGCTTCTCCCAAGCTGTCTGCCATCTCA
GGAGGGACCAACGCTCTTTGCAGTTCTGTAGCTTCTGTCTGTTCTTGTGAACCTTATGTTTCAATGTAAATGGGGCT
TTATGTCTTTTATTGACTTTGTAGTGAATACAATTGTCTCAGAGAGGCTGCTTCAAAGAATCACCTTGCTCTCTCTGCCCT
GACTCGGGCTCAGCTTTGGCAGGAGGTGTGATGTCTCAGAGCAAGTACAGCATTTTTTGAAGGAGCAAGGTGTTAATGG
CAGGTGACTCTGGCCCCCTTTATGTGCTTGAAGCTGTTTTTGCAGGTACAGAGTGGGAGTGGAAACAGAAAAAGGTTTTT
TCTAGTCTAGGTTCCCAAGCTTAAAGGCTTGAATTAAGGTTCCAAGAGAGGTAAAAGGTAAAACCAAGA
AATCATTCTCTGCTCTGCCACTGTGTCAAGGTTAAGGCTTGAATTAAGGTTCCAAGAGAGGTAAAAGGTAAAACCAAGA
GCTCATCAGACAGCCTGACCACAAATTTCCCTCTCCATTGTCTCTGTTGGGTGAGGTCTCCTAGCCAAATGACTTTCC

83/375

TTATCTTGAGGACCAGGCCAGTATCTGCTTATCCCTGAGGAGTGGGTTTTGGTTCCCTCACAGCCTGTGGAATTATTC
AAACAAGCCAGTCACATCCTCTTGTGGGGACCAGGGCTACCTTGCCCTTCTGTTACTTCAAAACCAGCCTCACATAGGC
CCTGCCTGTTTACCTTTTCTGTAGTGTGGCCCTGTGTGGGCTGATTGTCTCCCTGGGCTGTGAGTAG
ATATGACTAGCGAACTGCTATTAATCTCCTCTGTTAAGGTTGAGTGTATGTGGTTGGCCATCCCCATATTTCTAGGGT
GGGAACCTCTCCCTACCAATGGGGTAAAGAAGACACTGCATTAGCTTTTCTAGCCTCTAGCATGTATAACTATATT
TCCACTTTTCAACCACTTGCCCTCTCTCGTGTAAATACACTACAAAGAGAAGGAAACATGCCTGTAAATTTTCATCATGAT
ATCCTTGGTGTCCAGCACAGTGTTCCTTGGCACTTGATAAATATCTGTTGGATAAATGAATGAGTGAATTTCAAGGGTT
CTTTCTGAGTAAAGATTCCACTAAATAGTTTCTCCTCTCACTTGCAAAATGTTGTCACTCCATAATCAGGGATGGAATG
AGGGGTGTGAGCAGGGTGTGCACGTACCTCTAACTTCTCCAGGTTCTTCCAACCTCAGAGGTGTCCCAAGCAAGCCAA
AGAGAATAACAGATCCTTAGGATGTATCCACACCCCCAGTTCACTGCCATCTCAGTGTAGATTGATGTAATTTTCTT
GAGATAAACATTGACAGATGTGCTGAATTTGGCAACCACTGTACTTCACATCTTCTGAGACATTCTAGTCCACTTAC
CCAGTACATGTGAAAGGACTTTAGTGCTCCCTCTTTGTCTCTGGGCTATCTTCTCCAATCTGATTGTGTTGATGTA
GATGGCTGTTACAGCAACAATGAGAGCGTGGGGCTGGGGAGGAGAGAGCTTTCACTTAGTGTGTTTGTGATTGTT
TTGGCTATAGCTAGGCCAAGGTACTGTCTATTCTGTTTGTATTGCAGTCAAATTAATCAACAGGCATTTTTTCTCAG
CCATCTTCAAGTCGTGTGAGGAAAAATTTGGCCTACATGAGGTTTAGGAACTATCTTTTATTTCCCTTTATTTTCATG
AACATTTGAGCTTGAGGAGAATGTGAGCATTTTTTCAGATCATTTGGGCTTTATAGTTTCAGGCTTCATTTTTGTGCATT
CCCATTCTAAAGCTTTGTTTTCATATATTTGCCATTCTCCAATCTAAGTCTCACCATTAAAGTTAAGTTCACA
TCTGGTTTTCTGGGAATTGTTGCCTCATTATCTTTTTGTCTCTTTTCAGAAATCCCCTTTAGTTTATTATTTATTTT
ATTATTTTTATTTTAGTTTATTATTTTTTACATGATGTGCTACTGGTATTTATTATTTTATTTTATTTTATTTT
ATGTAGTGATATTATTTTATTATTTTATTTTACATGATGTGCTACTGGTATTAATTTTACTAATTTTTTGCT
TCTCAAAGCCAAAGACTTTGAGGAATTTCTTTCTTTCCAGGGTGCCTTATACAGTGTCTGTCTCATAATAGGTGTTT
ATTTTTCATAATAGTTTTTCTGCTGATTTTGTATGATGAGGAAACCAGGTAGGTATGCCTCTATAAGGGTGAATGTT
GTTTCATAGGAGACAAAATAACAAAACCTGGTGTGCTAGTTTGTGTTGAGCTTACATTAAACGGGTTCACAAGGCCCTCTGAGC
TCTGTGATTGAAGCAACAGAAACCATGAAGCATTTTATTGCAAGAGCAATCAGGCAACTTCCAGATGTTGCTAAACT
CTGCTTTAACTGTTGTGTAGAGCTAGTTTAACTGCATCTCCCACTGTCTACTGGAGACAATGATTCTAGAGATGTTACT
AATTGTCACTTGTCTTTGCTTAGATTTCTTCTGCTCCTTGTGGCGTCACCCAGCCGCTAGACGGCAATGGATTAG
AATTTACATGGAGGCTGTGGTCACGGTGTCTCAGGTGTTAAGGAACAAAGAAAAAGAGGTGCAGAAAGAAATAAATCAA
ATCATTATTTTAAATGTCTTAGTTTCCAACCAGGCAATGGAATTTAAGGGAGATTCCCTGACGGTTACCTTAAGACAT
CTGCTTTGGAGCCCTTAGCAGAACTCTCTGTGAGGATGATTGGTCTTAAGCCTCATTAACAGAGGCTTTGCGGCTCCA
TTGGAGGTTGGTGCAGCACAGGTGGGCGTTAGCACAGAGGTTTATAGGACCAAAACCCTTCAGCAACCAGCACTAATT
GGCTCCCAGGGAAGTCCCATGAGAAGCTGTCAATCGTGAAGACTGAGTTTTTGTGTTATAATATGTAGTGATTCTCTCT
TTGCTGCTCTTTTCTCTCCCTATCCAACTGCCTTTCTTCTTGCAAAATAGGTGGTGGTTCCCAAAGTACAGATAA
TTAGAAAGTTGAGGCAAACCTTACTTTGATTCCAACCTGCATTTTTCTCCACTCTCTATTCTCCCTAACCTTCCCTAT
CCCACCCTTAGTGTGAAACAATACCTGTCTATGAGGGAACCTCGCTGAGGTTGTGCTGACAAAGCTAGAAAGTA
GTGTTGAAAAATAAATGTACATCATCAGTGCATTTTATGAAGTGATTTCTAGTTTCTGTAATGTGACTTCAATTATGCT
GAAAATGGAGATCTTAGTCTCATCACGTACTTTTGTAAATCATTGTATTTAAGGTTAAGTACAGGGCAGGAAACAC
CTTCTCTGCAAGGATATTGGGTGTAAATAAAGAGAGGCTTTCTGTGTCTGGGAATGTTCTGCTAAGAAGACAGTGATG
ATAATAGTTACCACCTGAATAAGTACTGACATGTGAGGAACTACCAGGATCCCTGCTTTACAGGAAGAAGCCGAGGCTCA
GAAGTACACTTGTCTAAGGTCCCAAGCAAGTGTGAAGTGTGAGGATTTGAACCTTAAGTTTGCCTGATTTCCAAAGTTTC
TGTTCTTAAAGCTGTGTTTTGCTCATGTTTTGATTATGTTTGGCCCAAGGCTTTTGGTCCAACACAAAAATAATTT
AAATTAGTTATCAGACCAAGCATTCTTTCCAGTGTTTGAGGGACGGGACCACTCAGGTGTAGTTGACTAACCATTCTA
CATTTGGTGTATTTCTGTGGGGTCAATTTCCAGGGCCGTAATTCAGTCAATAGTTATTGCCAAATCCAGGTGATAGTAGGCT
TTGTGGGTGGTGAAGGTTAGATTAGAAGGACTTTAGCTTGCTTATAATCTCCCTGTTCTTTCTTACGCTGAGGTAGAAG
GTTGGTGAAGAGACTAGAAAGACTTGGGGGTAAAGTTCTCAAGTATTACACAACTGAAATTTGGTTCTGTCAACTGCCT
AGTTATGGGACATGATTAGTGCCAACAGGTCACAGGGGATTTCACTTCTCTGGTCAATATGATGCAGGATACAGGGT
TGGGGGATGTTCAAGGAAATAACAACTGCAGAAACATCATTTTTATCTGTTTTCATGCACACTTGTGGCCAGGAGATT
GGTAATTTCTTCTTTCTGATAATACTTAATGAAGAGACTTTTATTTTGTACTAGTACTTACAGGAGGACTTAAGCCCG
ATCAATGCAAAATGATTTTTTAAAAAATCATTAATAATTAACCTTGGGCATTATCTTTAGGTTGTAAGTGTCTAACT
CAGCCACCTCTTTCTTTTATTATGAGCAAAAGTAATCAAGACCATCAGTGTAAATTAATTCAGATAAGCCAAAAACA
TACATATTCTTATTTTAAATGAAAGAAATGTTAGTGTGTGATTGTTTTTATATTATTTTAAATTAAGTTAAATGGAA
TAGAAAGGTACCAATTTAATTACATATTGAAATTCCTCTAAAGCCTTCTCAGAAAGTACTTCTTTTATGTTGAGATTAC
AAAAAGAGATGTAGGGGGAAGATATAAGGGAGAAGGAGAATCAGTTCAAATTTGTTTTCAGGTCTGATTGTGGCTAGGAA
AATTGATTCTGAAATCTAAGTTTGGAAAATTAATAAGCAACTCTTCTCAAACATAACCTGGTCAAGTATACCATC
CAAACATTCAAGGTGTTTCTAATTTGATCAAGAAATGGTATGGAAATGCACATGTAATCTAAACCATATTTTAGCT
GTAATTTTTACCTTCTCTATTGTATCTATGTTCAATAAAATAAATATCTCTAGCAAAGAATTCATATAATAATGTT
TCCAGTCTTCTTCACTTTTATGTTCTTCCATAGGGTAGACAAAATTCAGTAAACAATAAATGATCAAAATATGAGA
AAAATAAGGAGAATGAGAGACAGTCTCTGGGTGGCATATAAACAGGATGGCCATCCTCTGACTCACAGGCTGTCTTGTA
AGGTTGGCAATGACTTTGAAATTTTATCAAGTCTATCTCTTTTCTGGCAAGACTATTCTTATACCTTTCCAGTA
GATGTTAATCTATCTGTTTTTAAATGAACTTCTAGTACAGAGACATGGTCCCTTAGGAACTCATTGTGAAATTA
GAGGGTTTTCAGAGAAGGACTCTGTTGTTTATTTTGAATGTTTCATCTTCCATAGGGATGATCAACTTTATATAAACA

[illegible]

Fig. 6.79

85/375

[illegible]

86/375

TTTCTTTCTTCAATAAAAAATTAATAGCTAATTTTTATCTTTAACAATTTTGACTCCTGTAATAACACTACTTAAAACG
TAAAGCACCATATAGCTGTACAAAAATATTTCTTTCTCTTTCCCTTTCTCTGTATCCTTATTATATAAGCTTCTTATTA
AAAAATGTCTAGTTATCTCTTTTATTTTTTTGAACCTTTTTCTTAACTAAGATACAAATACACATATTAGTCTAGGC
CTACATAGAGTCAAGATCAACAATATCACTGTCTTTCACCTTCATACCTGTCTTACTGAAGATTTTCAGGGGCAATAA
CATGCAAGGAGCTGCCATCGTCTCTGATGACCATGCCTTCTTATGGAATACCTCTTGATATGCCTACCTGAGGCTGTTT
TACAGTTAACTATTTTTTTAATAAGTAGAAGGACCACACTCTAAAGTAATGATAAAAAAGTATAGTAAACACATAAATTA
GTAACCATTAATTTGTTATTGTTATCATGTATTATGTAGTACACATAATTGTGTGTGCTCTAATTTATATGAATGACAGC
ACAGTAGGTTTTTTATGCCAACATTGCTACAAACATATAAGTACTGCTTCCATTATGACATTACTATGCCATATGGTAT
ATTAATAACTAGGCTATAGGAATTTTTTCAGCTTCGTTATAATCTAATGGGACCCTGTAGTATGTGGTCCATTGTTGAC
CTAAATGTCTATTATATGGCACATGATTATACTTGAAAATAATCAAAGTTATCAGATAGAGAAGGCTTAGGGATGCAGAA
CCATCTTTACAAGTTTTTGTGCTTTGAGACAAATCCAACCCGACTATTACCAGCTTAGAGACACCTCCTAGCTGCCT
CTAGAGATGTATATCATCTTTGATCAGGGACTGGGGACCTAAAACAGGAACAATAGCATAGCATGCTTTTATGTGCAAT
GAATTTTCAAATATTAATAAAACCTTCAATATTGTTGTTATATTATCTGCACAGTATTAGGAAAAATGAGTAATAACT
TATAAGTGAAAAATACCTATGCTGCAAAAACTCTTTTAATGTTGACTCCAGTTTCAGCAGAATAAATTTGTCTGATG
ATAGCCCCAGTGTCTACAGAAAAATATACATTTTCTATTACTGGGGTTACAGTGTATGTAGAAGCACTGTGAGAAACCTT
GACATTTTGGCAGAAAAAGGATTTTTTAACAATAAAATTCAAGAAAAGGTCATATTAGTAGAAATTTTGGTAGTCATTTTA
AATGTCTCCACATTATATGGCATCATAAATGCATTTAATATCAGATTGAATTATGGCTGTAATCTTTAGCCTTAGTAG
TCTGAACATCATTTTCATACCTAGCTTAATATCTCGAATGTTATGTGTGGTTTCTGCTTTATTTAAATAGAGGAGTGA
CAAGGGTGATGAATACATTTTATTTCTGTTTTCTCATCCCATTTTCTATTGCAAATGAATTTTTTTTTCAGAAAGTAGGTA
TGCTTACCTGTATCTTTGCAAAATGCATTTTCAGAAAAATAGGTTTGGAAATATTCAATTTAAATCCTATTTCTGTGACCC
AATGTAACTCACTGCTGTTAAATCTAAAGTGTGTGAGTTCTTACAGCTGAGCAGTAATTTCTACTGACATTTTAATGTC
ATGTCCTCTCCTTAGCAGCCTGTTGTCATATTGCATGCAGGCTACATGTTAGGATTTTTTTAAACATGAGGTGTCTTGG
AAAATGATTTTGACACAACCTGTCTCTTGGACCACTGTATTTTATAAACATTTTAAATGCTTTTACTCTTGAATGATCC
ATTTCACTAAGAGTCAGAAAACTGAGTTTCTGTCTATGCCATGGTGACATGATGCTGACATTGCTGAGCTTACTTACTTAT
TCCTTTTACCTAAATGTTTAATAGAACACACCCAGCCCTGTGTGGGCATGAGAGGGAAATGGGCCAGAAAGTTGCGATG
GTTGCAATTCACAAGCCATTAAGCTGTGGTCACTTCTCCCTAAAGCATTTGACCTCCCTTAGACAACCTTCTCTTTGGG
GAGTTGCAATATCTAGAACTTCAGAGGAAGGGGTCCAGCTGCAGGGATATGGTTAAAAGTTTTTTTCAGAGGAGCCACT
TTGCATGGCAGTGGGCCATTTCTGCTATCACTCAGGCCAGCCATCCCAAGTTACAGTCTTTGGCAAGAAACAGAA
GAAACAGTGGTGGCTCTTGGAGCCACATGCTCAATTTTTGATGGTGTCTTTGCGCAGTGAATGCCAGCTGCTCCTCA
ATCAGGTATGCTGCTGTTGTTCTGAGAGTGATTAGGAACAAAAGGGATGATGCAGATGTGTGAGGCTATGGGAAGTGCA
AATGTATATTTTGGAGCACTGAATGTAAAGAGATTTAGAAGTTTCTGTTGGAAAGCAGGCTATCGAAGCAGGCAGGC
AAAATGATTTTGACACCAATACCAACCAAGGGCAAGAAGTGAAGCTTGGAAATATACTTGTTTGGGAATAAGAAATTG
ATAAGACAAATATACCTTTTAAAGAAAGATAAGAGAGGTGATGAAAGAATTGTGAAGGTCCAGTCTGTCTATTTCC
TTTGCTACCACCTGAGTCTGTTACCATGGTCTCACTTTGCATGAAAGCAGTCATCTCTACCTAAGCCCCCTTCTGTTT
ATCTTGCTCCTTGGAGGCTGGCCTCCACATCTTTGAAAATACAAGTCTGATTTTGCCTCTCTCTGCCCAAACCTGCCA
ACAGCTTCCCAACTCATGAGGAGTGAGATCAATATGCTTGGCATGGCTGACATGGCATTCTTGGGCCTGGCCCTGACCT
TCTCTGCTCTTATCTTGCACCACTCTTACTGTCACTCGCTCCCTTCAGGTCCCTCTGTTTCTTGGCTGCTCTTTTATAT
GCCATCCCTCTCAGGGCCTTTCCACCTTCATTTCTGATTAGAATATTCTTCCCCAGATATCCGTATTACACACTTTC
TCACTCCATATCATCTGTTCAAATAGCACTTAAAAGAGAGGTTCTGTGGCCATGCTATCTAAAATAGCACACTCACA
TGCACCCATGACTTTCTCTCCACTTACCCTATCTTCTTACAGCACGTAGCACCACCTGTCTATTTCAAGTTGAA
CCATATGAAATTGCTTTTGGGTGGATCAAGAACAGCTGAATATTGGCCATTTCAATTTGGTTCAAACATAAATATTTTA
TTAATTTGTTTATTATTTGTATTTCTTCTATCTATGATTGAAACCTGTGGGTCAAAGGTTTTGTTTTGTTTTGGCA
ACATCTCCAATGTCTAGAGCACAGCAGGAACCTTAGACAAGTTGTATTGAATTAATGGAAGGAAGAAGAAAGCCATAT
AACTTGTGTGACAGTAAGCAGTGAACACTTATATGAAAAATGATCTCTCTCCCTTTCTCTGTCTCTGTCTTGTGTGTG
TGTGAGAGAGAGGGAGAGGAGAGAGGAAGCACTAGAGGACTCTAGAAAAAGGTGATGGGATGGGCTTCAGAGGGAAT
CCAGAAAAATTAAAGGATTTATTTGGATCCATGTAAAGTTCACTGTAATGTTTCTAGTTGTAGCTAGGGGCTATGTATGC
ACCTATAATTATTATATATTTTTTCCATGTGGTTTTCTGAAACTGGGACCAAGTGGGATCAAACAAGCTTTGGATAAT
ATAATTGTGAACCTGAAAAAGTTTTATAATTGGTAAATTACAAGGATTCAGCTTGGCAATTGTGCTGTAAGTTGATTTTT
ACTAGAGAAAAATAAGTTACTTTTTACTAACAGTTCTAGAAACATGGCTAATAATCTTACTATCATCCCTGCTACGGATG
CTTAGAAATACTGCATGTCTAATCTTGAAAGGAAATAAAATCATTACTATGGGTGAGAAAGTAAAGGTTGAATTGAAAAC
TCCAGGGATAAAACACTGAATTGATACTGTGGCTGCCTTTGGGACAGTATTATTAGTCTCACTAACAAAGGGCTTGAGA
TATGAAATGGAATTTGAGGTTCTGTGGGTTGGAACAGAGATCTTCAGTACAAAGTTGTGACCTTGGAAATGGAAGGAC
TGAAAAAAAATCATCAGAACAGAAGAGACAAGAGCTGTGTCTTAGAAAAAGAATGTCTCCTTCAAAAAACACATCTCT
ATGGATTTGTACCTCATTTAGGTTTGGGAATTGAATTTGTACTACTTGTGTAGTATGGAATAATCACAACCTTGAAAAAT
TAACTACAGAGAGCCAGATTACTGATACTTCTAAAGCACTGGCAGAAATCTGTTACAACTTCTTAGGAGAAAGATAC
CATTCAACCAAGTTTTACAAGATTCCTAAACATAAATATCTTCTAAAGATTAACTCACAACCTCAAACCTATAAAACATA
AGAACAAAATCCCCACAAGTGAGAGTTAGCAAAACAAAAGAGCAGGATTAGAATAAGACCTAAAGGTGATGGAACAT
CACATAGACTATGAAAAATGAATATTGAAAATGATAGAGACATAAATGAATTATAAATAAAGAAAAATAAGGTTAAA
AAAAGAACACACTTTATAAAGGTGAAAACCTAAAGTAATTGAAATTAATAATTTATCATAGGTTAAACAAATTAGATATA
GCTGGAGAGAAAAATTAGTAGACTGTAATATAATTTGAAGAAATCAACCAGAAGGCACTGAAAAGAAAATGATAGAAGAT

87/375

ATGAAAAAGAAGTTAAGAGACATGTTGGAGAGCATAAGATTCAATATATGTTTCATAGGCCCTTCTAGAAGGAGAGCACA
GGAAGATTGGGAAGAGGCAGTATCTGACTATAATGCAATTAAATTAATAATTTAAATTAAAAAGACAACAAAAAGAATC
CCACATGGATTGAAATTAATCAACACACGCTTAAACAACCTCATGAGTCAAGCAAAAAATAATGAAATTTAGAAAAT
ATTTAAACTGAATGTTAATATTAATTAATTCATCCATTAAATATTGTATGAGAAGCAATGAAAGTTATAGTTAGAAA
GTTATAGCTTTAAATGCCTATATAAGAAAAAGGTACAAATTAATAAAAAATTAACCTTTAATTTTTTTGGCTA
CATAGTAGATGTATATATTTATGGGTACATGAGATATTTGTACAGGCATGGGTACAGGCATGCAATGTATCATAAT
CACATGGGGTGTAAATGGGGTGTCTGTACCTCAAGCATTTATTTTTTGTGTACAAACAATCCAATTATACTCTTTTA
GTTATTTAAACTGTACAATTGAATTATTTTTGACTATAGTCACCCTGTTGGGCTAGCAAACCTTAGGTCTTATTCATT
CTTTCTATTTTTTTGTACTCATTAAACCATCCCCACTTCCCTCCCTCCCTTACCCTTACAAGCCTATGGTAACCAT
CCCTTTACCATCTATCTCCATGAGTTCATTTGTTTAAATTTTATAGTCTCCACAAATAAGTGAAACATGCAAGTTTGT
CTTTCTGTGTCTGGCTTATTTAACTTAACACAATGACCTCTAGTTCATCCACACTGTTGTAAATAACAGAATCTCATT
CTTTTAAATGGTTTAAATAACTCCATTTTGTATATGTAACCCGTTTCTTTATCCATTAAATCTGCTAATGGATTGCTA
CCAATTCCTGGCTATTGTGACTAGTGCTACAATAAACACGGGAGTGTAGATATCTCTTTGATATACCTGATTTCCCTTCT
TTTGGGTATATACCTAGGAGTGGGATTGCTGGGTATATGGTAGTGCTATTTTAAATTTTTTGAGGAACCTCCAAACTG
TTCTCCACAGTGGTGTACTAATTTACATTCCCAACAGCATACAAGGGTTCATTTTCTTCACATCCTCGCCAGCA
TTTGTGTTGCTGTCTTTTGGATAAAAGCCATTTTAAATGAGAGTGAGATGATATCTCATTGTAGTTTGTATATGCATT
TCTCAATGATGTTGAGCACCTTTTCATATATCTGTTTCCATTTGTATGTCTTCTTTTGAGAATTTTTTACTCAACTCT
TTCACCCATTTTTTAAATTAGATTATTAGATTTAATAGTGTGTTTGTGTCTCTTATATGTTCTGGTTATTAATCCCTTA
TCAGATGGATAGTTTGCAATATTTTTCTCCCAATCTGTGGGTTTTCTCTTGTCTTGTGACTGTTTCTTTACTGTGC
AGAAGCTTTTTTAACTTGATGTGATCTCATTGTCCACTTCTGTTTTGCTTGCCTGTGCTGTGGAGCATTAATCAAGAA
ATTTTTGCCCAGTCCAGTGTCTGGAGAGTTTTCCCAATGTTTTCTTTTCAGTAGTTTCATAGTTTGAGGCTTAGATT
AAGTCTTTTCATCCATTTTGGTTTTGTATATGGTGAGAGATAGGGATTGGGTTTCACTCTTTTGATATGGATATCCAGT
TTTTCCAGCACCATTTATAGAAGAAATCATCTTTCCCTAATGTATGTTCTTGGCATTGTTGTTGAAAATGAGTTCCCT
GTAGATGTACGGATTTATTTCTAGGTTCTGTATTCTATTCCACTGGTCTATGTGTCTGCCTTTATGCCAATACCATGCT
GTTTTGTACTATAGCTCTATAGTATAATTTGGAAGTCAGGTAATGTGATTCTCCAGTTTTGTTCTTTTGATTAGG
ATAGATTTGGCTATTCTGGGCATTTTGTGATTCCATATAAATTTTAGGATTTTTTTCTATTTCTGTAAAGAATGTCAT
CAGTATTTTGATAGGGAGTGCATTGAATCTGTAGATTGCTTTGGATAGTATGGACATTTTAAACAATATTCATTCTTCCA
GTCCATGAACATGGGATATCGTTCCATCTTTTTGTGTCTCTTCAATTTCTTGCACCAGTGTTTTATAGTTTTCTATTGT
AGAAATCTTTCATTTTTTGGTTAATTTCTAGGTATTTTATTTAATTTGTAGCTATCATAAATGGTACTACTTTCTTGA
TTTCTTTTTCAGATTGTTCACTCTTGGCATTTAGAAATGCTACTAATTTTTCTATATTGATTTTGTATCTCTGTAATTT
ACTGAATTTGCTTACCAGTCTAATATTTTTTGGAGAGAGTCTTTAGGTTTTTCCAAATATGAGATCATATCATCTGCA
AACAAGGGTAATTTGACTCCTTCTCTTCTAATTCGGATACCCTGTGTTTTTTTTCTCTTGTCTTACTGATCTAGCTAGGA
CTTTCAGTACCATGCTAGTAACAGTGGTAAAAATGGGCTTCTTATCATGTTTCTGATCTTAGAGAAAAGGCTTTTCAG
TGTTTTCTCTTTTAGTGTGATAC TAGGTATATGCTTTTGTATATGGCTTTATTGTGTTGAGGTATGTTCTTCTATAC
ATAGGTTTTTGGAGATTTTTTACCATAAAGGGATGTGAAATTTTATCAAAATGCTTTTTTCCAGCATCAATTGAAATGGTTTT
TGTTCTTCATTCTGTTGATATGATCTATCACATTGATTGAGTTGCACATGTTGAACATATCCTTGCTTCCCTGGGATAAA
CCCCACTTGGTCATGAGGAATATATTTTTTAAATGTGTTGTTGAATTTGGTTTGTAGTATTTTGTAGGATTTTTGTA
TCAATATTCATCAGTGATATTGGCCTGCAGTTTTCTTTCTTGATGTGTCTTTGTCTGGTTTTGGTATCAGGGTAATAC
TGGCATCGTAGAATGAGTTTGGAGTATTTCTCTCTCTATTTTTTCAAATAGTAACATTGTTATTAGTTCTTCTTTAAA
TGCTGGTAGAATTCAGCAGTGAAGCCATCAGGTACACAGCCTTTCTTTACTGCGAGATTTCTTTATTATAGTTTTGAT
CTGTGTCTTATTTATGTTCTGTTTCTGAGGTTTGGATTGTTCTCTGGTTTCCAGCATTTGATGTTGTGTCTAGGAAT
TTGTTCAATTTATCCAGATTTTTTAAATTTACTGGGATTTAGTTGCTCATAGTAGCCACTAACGATCCTTTGAATTTCTA
CAGTCTCAGTTGTAATGTCTCCCTTTTTCATCTCTATTTTATTTATTTGTGTCTTCTCTCTTTTTTCTTAATCTGGCTAA
AGGTTAATCTATTTTGTCTTTTCAAGAAGCAAATTTTTAATGGATCTTTTGTATTTTCCCTGTTTCAATTTCTATTTAT
TTCTGCTCTGAACTTTATATTTTTTCTTCTACTAGTTTGGGTTTGGTTTGTCTTTGCTTTCTCTTCTCTAGTTCTTTA
AGACACACTATTGGGTTTTTTTATTTGAAGTTTTTAAATCTTTTTTGTATGTTGGGCACTTAAACTATAAGTTTCCCTTTT
AGTACTGCTTTTGTCTGTATCCCATAGGTTTTTGGTATGTTGTGTTTCCATTATCATTTGTTTCAAGAAATTTTATAATTT
CCCTCTTAATTTCTTCATGACCCGTGGTCATTCAGGAGCATATTGTTTAAATTTCTATGTGTCTGTTTAGTTTCCAAAA
TTCTCTTGTTTTAAATTTCTAGTTTTCTTCCATTGTGGTTGGAGGAGATAGTTGATATTTTCAAATTTTTTGAATGT
TTTAAACTTGTTTTTGTGACCTAACATGTGGTCTGTCTTGGAGAATGATCCATGTGCTGAGGAAAAGATGTGTATTCT
GTGTATTCTGACCCATTGGATGAAATGTCTGTAAATATCTATCGGGATCATTGGTCTATAGTGCATATTAAGTCTG
ATGTTTCTTTGTTGATTTTTCTATATGGGAGATCTGTCTATGACGAAAGTGGGCTGTTGAACCTCTCCAGCTGTTATTTT
CCTGAGGTCTGTTTCTTTATCTCTAATAATATTGTCTTTTATATCTGGGTGCTCCAATATTGGTTACACCTATTTATA
ATTGTTATACCCTCTTCTGAATTTGAACCTTTTATCATTTATATAATGACCTTCTTTTTCTTTCTTACAGTTTTTGTGT
TGAAGTCTATTTTGTCTAAGTATAGCTACTCCTGCTCTTTTTTGGTTTCCATTGGCATGGAATATCTTTTCCACCCTTTT
AGTTTCAGTCTGTGTGTGTTTATAGGTGAAGTGTGTTTATTATAGGCAATGTATGTTTGAAGGATTTAGCACCAGATA
TACTATTCTAGGGTAAAAGTTTTTCTTTATGCCCTGTAAATGTGTCTATGTCACTCTCTCTGGTCTTTAAGGTTTTCAC
TGAAAAGTCTGCTGACAGACATATTGGAGCTCCATTGTGTTATGTGTTTCTTTCTCTTGTCTGCTTTTAGGATTTTCT
TTTCTCCATAGCTTTTGGGAGTTTGATTATTAACACCTGCATTAGTCTTCTTGGGTTAAATCTGCTTGGTGTCTAT
AATTTTCTTATACTTGGATATTGATACTCTTTTCTAGGTTTGGGAAGTTCTTTGTTATGATCCCTTTGAATAAACTTTC

Fig. 6.82

88/375

TACCTCCTCTTCATGGCCAATAACTCTAAGATCTGCCCTTTTGAGGCTATTTTCTAGATCTTGTAGGCATGCTTTATTC
TTTTTTATTTTGTCTTCTCTGCCTGTGTATTTGCAAATAGCCTGTCTTCTAGCTCACTAATTTTCTTCTGCTGGATC
AATCTGCTATTAAGAGACTCCAGCTGGGCACAGCACTTTGGGAGGCCAAGGCGGACAGATCACCTGAGTTCAGGAGTT
TGAGACCAGCCTGGCCAACATGGTGAAACCACGTCTCTACTAAAAATACAAAAATTAGCCAAGTGTGGTGGCGTGTGCC
TGTAATCCAGCTACTTGGGAGGCTGAGGCAGGAGAATTGCTTGAACCTGGAGGCAGAGGTGGCAGTGAGCTGAGATC
ACACCACTACCTCCAGCCTGGGTGACAGAGTAAGACTGCATCTGAAAAAAAAAAAAAAAAAGAGAGAGAGAGA
GAGACTCTGATGTATTCTTCAGTATATCAATTGCATTTTCAACTCCAGAATTTCTATTTGATTCTTGTAAATTATTTTC
AATCTTTTGTGAAATTTATCTGATATTATTCTAAATTCCTTCTTTGTATTATCTTGAATTTCTTTGGGTTGACTCAAA
ACAGTTATTTTGAATTCCTGTCTGAAAGGTCACATATATCTGTTTCCCAGGTTTGGTTTCTCATGCCTTAATTAGATT
GTTTGGTGAGGTCATGTTTTGCTGGATGGTCTTAATGTCTGTTGATGTTTGTGCTGAGTGTCTGGACATTGAAGAGTTAGGT
ATTGTCTATCTTCACAGTCTGGGATTCTTCATACCCATTCTTCTGGGAAGACTTTCCAGGTATTCAAAAGTACTTGGGT
ATTATGATCTAAGCCATATCTGCATCGGGGTACCACAAACCTAGTAATGTGTGGTTCTTGCAGAAATCATAGAGGTAC
TGCTTGGTATTCTTGCATAAGATCCAGAAGAATCATCTGGATTACCAGGGAGAGATTATTGTTCTCTCCGTACTTTT
CTCCCAAACACAGAATCTCTCTCTATGTTGAGCTAACCACCTAGGGCTAGGGGTGGGGTGACAGAAGCGTGCCTGTTC
ACTGAGACTGCGTTGGGTGAGCTTGAAGCCAGCATAGCACTGGGTCTTGTCCAAGGCCTGCTGTAACCACTATCTGGC
AAGGCCCTAGATACCTGGCCGTACTTAAGGTACTGTTCACTTAAGGCCCAAGGACTCTTCAGTCAGCTTGTGGTGAATG
CAGCCAAGTCTGAGACTCATCCCTTCTGGCTCAGGGCAGGTCCAGAAATGCCATTCAAGAGTCAAGCCTTGGAACTGGG
GACCCCAAGAGTCTGCTTGTGTCCTTAACCCACCATAGCTGAGCTGGTACCTGATTTTTGGTTCTTCTGAAGGTGTGAT
TTTTGCCTAGATAGTTGTTACATTTGGTGTTCCTGTGGGGTGGGGGGACAATCAGTGGGGCCTTCTATTCCACCATCTT
GCTCCCAAAGGAGTAAATATTATTAATAATAAGATCAGCATCCAATTCAGAAGCTTAGAGAGTAGGCAAAGCAAATATA
AAGTATAATAAAAGAAAAATGTGTGTATTAAATAATATATAAAACAAAACCTGAAAGCCCTGAAAAGACTAATAAATAGGT
TAACATGGCATGTTGAGTAAGGAAACCACTGGAACATTACAGCTACTAGTATATTGGAAATAATCCCTGTACATCTG
GAACAAGAGAAGAATGACTTCGGGTCTGCTTATGTTTAAATTGGTTGTTCTAGCCAGCATTGTAGGTAAAAGAAATAAA
TAAAAGGTAGATAGAAAAGAGAGAAACCTAATTGTTATTAGTAAAGAGACTTCATTGAAAACTATTAGAAAATAATAC
AAAAGTTCAGGAAAATGTCTAGATATAAAGTAAACCACCTTTGTGTAACCCAGCAAAGACAATTAGAAAATTCTGTAA
ACTACCTTTGTGTAATACCAGCAAAGACAATTAGAAAATTCAGTTTAAAAGCAGATACCATGAATACAGCAAAAATTAG
AAACATGTTAGTATAAATCTAACAAAGGATTTTTAGAAAATCTTTACAAATAAAATTACAAAATTTTAAGGTAAGACACA
AAGAAGATGATAAATAGAAAAGATATACTATACCTTAAAGCAGAAATGACTCAGTATCAGAAAGATTCAATCTTTCTGTA
TTCATTTATAAATTCTAATAAGAGCTCACACAAGAGTGGTTTTGTTGGTTGTTTTCAGGAAGTTGACAATCTGATCAAT
CTGATTCCAAAATGTATACAAAGAGCTAAGCGTCAGTCATAACCAACACAATTTTGAAGAAGTCGGAAGATTAGCCCT
ACCACATGTCAACAGCTACTGTAAAAGTATAGTGATTAAAGACATTGGGATATTGGAGCAGCAATAAATAAATACTAG
GTTTAGAAATAGACTCATGTGTCCCTAAGGATGTATTACAAATCAGTGTGGTAAGGATACAATAAATGATGCTAGGAGA
TATAATTATTACATGGGGAAAATAAAATAAAGTACCCTTTCTTACAACATATAATAATTAAATCCCATGTGGAATGT
AGGTGTAAAGGTGAAAAGAATAGTAAAGATTTTATGTTTTTTAGAAAGAAATGTATGAAATATCTTTGTGGCCAGTGGG
CAGGGAAGGATTTCTTAAGACTAAAACCCATTACGCCCTAGTGTCCATTATTGGAATGCTAAGCATGTGAGAGTTATT
TATTATCCTACTGCTCAAGATCATCGCCAAGGCCTGATTGCAAAAATTCAAAAAATTGCAACCTCAGGCATAAGTGGG
TTAAAAGACAACTATAAAGAAAAATAAATAAGGTTGAATATATTAAAACAAACATTTTTGAATAGCAAATAACACCA
ACAACATTTTTTAAAAAATTCAGAATAGGAGATATTTATAGTATATACAACCAACAAAAATTAATATGCATTTTGTATG
AAGGAATCTTTCAAATAAATATTTAAAAATTCATCCAATGGAAAAATAGGTGAAAGATATGAACAAACAATCGACAGA
AAAAATGGCTGATAAACACACAAATATTTGCTTTAGCTCACTAGTAATCAAGTAAATGCAATTTAAAAAAGGAAAAAT
TTTATTTTACACCAACCAAGTTTTAAAGAAATTAAGTGTGAAAGTGCCAAATAAGAATAAATTTGGTAAAACCAATTGGAAA
AGTCAGTTTGACTTTACTTTAGTAAAGTTAAACATTTGCATATCTTGAAGGAGGAATTCACCTTCTAGGCATATATCTAG
AAACATGATTGGATGTGTTTGGCAGGGGACATGCACAAGGATGTTTATCTAGCATTAATTTGAAATAGCATGATCTC
AAAAATAAATTTCTGTATTTCTATCAACAGAAAGAAAGTACAAATAAAAACTGGGATATTGTTGCAATGGACTTACAGCA
TAGTAGATGAAATGTATAAATTCATGAGATACATTAACATGGGTAATGTTAATAAATTTAATAAACACATAAATAGCA
ACATAAATTTAAGCAAAAAACAAAAACAACTTGCAGAGGGATTAATATTATTTGATGCCATTTCTAGGAAGTTTTAGGAC
ATTCAAAACAATATTTTATGTTTTTAAAGAATACATCCATAGGCAGTAAAAATAATTAAGAGAGGTTGGAATCCTAAAC
ACCAATTGTAGGATTTTTCTGTGAAGGGAGGTAGGGAAGGAGGTAAATGGGCTCAGAGAGGGAAGGATACACTGGGCTT
TCAAATCTAACGGAATTGTTTGTTTTTTCCCCAACATTTTATTGATAATAATTAAAGATTCATAGGAAGTTGCAAAA
ATTGTACAGATATGTCCTGTGTACCATTACCCAGTTTCCCCAATGATTATGCCTTGCATTACTATAGTTATTATAGT
CATGAATTTGACATTGATCTCATGTGTTTGTGTAGCTCTATGTCAATTTGTTACATGTGTAGATTGTGTAAATCACCAC
TTCAATCAAGATTCAAGACAGCCCCAATCACTACAATGATCTCCCTGTGCTATGCTTTTATAGTCACAGCCACACTCC
TTTGCCACCATATCTAATCCCTGGTAACCACCTAATATGTTCTTCATCTCTATAAAATATTGTCTTTTGTAGACTGTTA
TATAAATTAACCATATAGTGTGACTTTTTGAAATTGGCTCTTTTTCTACACAGCATAATGTCTTTGATCCTTGAGATC
CTCCAAGCTGTTGTATGAATCTGTAATCCATTCTTTTTATTGCTGAGTAGTATTCATGATATGGATGTAACAGTTTTT
TAACTATTACCTATTGTGGGACATTTTAGTCTTTTCAATTTTTGGCTACTACAAACAACTGCATATAAGTTTTGCTG
CGATCATAATCTTTTTCTCTGGGATAAATGCTTCAGAGTGAATTATGGGGTCATATGGTAAATGCATATTTAGTTTTT
AAAGAAAATTAAGAAATTTTCCAGAGTTTTTCAAACATTTTTCCAGAGTTGCTGTACCATTTTATGGTACAGCCATATG
TTGTTGTTCCCTTAATGACATGTGAGAGATCCAGTTCTCTCCATCTTTGTGAAGCATTGGTATTGTCACTGTATTTAT
TTTAGCAGTTCAAAGAGGTGTGTAGTGTCTTATCATAGTCTTAATTTGCATTTCTCTGATGGATAATGTACTAGTT

89/375

TTCTATTGATGCTGTAACAAATAACTGTAAACTTAGTGGCTTAAAACAACATAAACTTACGATTTTACAGTTCTGTAGG
TCAGAACTCTAACACAGTTTTCACCAGACTGAAATCAAAGTGTGGTATTCTTTCTGCAGGTTGTAAGGGAGAATTTG
TTTCCTCATCTTGTCTAACTCCTAGGCTCTACTCATATTCCTCGGCTCATGGCTCCCCTTCTCTGTCTTCAAATCCAG
CATTTGTGGGTTCACTCCTCATATCATATCATTCTTACCTCTTCTGCCTGGGTCTTCCACTTTTCAGAACCCCTGTGAT
TAAAGTAGCCCCAACCAAATAATCTGAAATAATGGCTGTATTTTAAAGGTGAGCTAATTGGCAATCTTAATTCATCTGC
AACCACAGCCCCCTTTGCCATGCCAGAATAACTGGTCTGAGGATTGGGTGTAGACATTTTATAGGAGCCATTGTTCTG
CCTATCATAGGTAGATATGTTGAACATCTTTTCATGTGCTTATTTGCCATCCATATGTCTTCTCAGTAAATGTCTAT
GTCTTTTGGCCATTTTCAAATTTGGATTGTTTGTGTTTATTAGTATTGAGTTTGGAGGTTTAAATTTTTTGTGTAGA
TATAAGTCTCTATAATATTTTGTGTTTACAAATATTTTCTTTCAGTCTATAGCTTGTCTTTTCAATCCCTTAGCAGGGGC
CATTCAAAAACAAAAGTTTAAATTTTGTGATGAAGTCCAATTCATTGATTTTAAAGTAAATATGCTTTTGTGTGCA
TTCTGTATAAGAACTCATCCCAAGCACTAAGCTCTAACATTTTCTCCTGTCTTCTAGAAGTTTATAGTTTATATT
TAATTCTACACCCATTTTCGAGTAATTTTGTATATAATAGTGAGGTGCAAGTTGAGATTTATTTTATCTATTTAATTTG
TCTGTGAATGTCTGTATGCATTGCTCCAGCACCCTTGCTGAAAAGACTATCCTTTCTCTACAGAACTGCTTTTCCACT
GATGTTAAAAATAAATTTGGCTGTATTTGTGTGGGGATGAATTTGTTTCATTCTTAATGAAAAGAGGAAATACAATAAAC
TATTAAAGTCTAATAAGGCTAAGGGCATAGTCAATGTGTTGTTTATATTTTCTGTTATATTGAAATATTTTAAAT
CAATAACGTAATAAGGAGGCATTTGCACCTCAAACCTCTGAAAATATTAAGAAAAGTGGGTAATGCTATAGTGAGATGTT
GATCACAGTGGATTGGAGACTAATAGCTGTATGATATTGATAAGGTTACTGGCTCTCTGGGCTTCAGTTTATTTT
TTTTGTGAAGTGGAGGGCTGAACTAGGAGACCCCTGGAGTCTTTTGACATTTGCATGCTCACATAGTATGTGATGCTT
CTCATTTGTTGAGTTTAGAGTAAGAGATGTGGAGCGGGATCTAGGCTGTCTATTCTGGTTTACAGCCTAAAGATGAGACAC
TGTTTATATTTCCAGGTAGAGGCTGCCTAATTAACCTACAGGTTTATAGTGGTTGGGAGCAAGCCCTCTTTTCAAACCTA
CTTCGGGAGGTTTATTATACCTGTAATAATCATTATACTATAGAAGATATCATTGTAGTTTCTTATAAATACCTCACA
CACTTCTTCTGGATTTTATAATGGGGTCACTATATGATGCTTCTTGGGATCTGATTTACAATTTATAAATAAGTCTGAA
ATATAAATAAGAAATACAATGTATAAGAGTCTAGAGGTTTAGTCAGCAGAATTCCAAATAGGAGTTTAAACCTCTAA
GGAGCACTTACAGTCTTCTAGAAATAAACACATTGTAAATGATTATGAGAAAATATTTATCATACACATTTTAATTG
ATAATTTAGCTGTTATATTTAATTAGAAAAGAGTTTCTGATTTTCTTTATGGCTATGACTTTAAGCCTGTTATCTAGA
ACACAGTTTATATTTTCTGGTTTCTATCATGACAGAAGGCATTTTGAAGGGCTAGAGCAAGAAATTAGCAACAGGACG
TCAATTTCTGCTCTTCTTGTGTTACTTCTTCTGGCTAGTAGCAGAATTTTCTATCAGTAATTTTGGCATCAATAAAAT
AATAAAGGATTACAACTTCATCCATCATATGCCAACAAATTTGATAACTTACATGAAATGTACAAATTTCTGGAAAGA
TAGAACTACCAAAATGACCAATAAGAAGTAGAAATTCCAAATAGACCTACAACAAGTAAACAGATTGAATTAATAA
TTTAAATTTCCACAAAGAAAGTCCAGGCCCAAATGGCTTTACTCGTGCATTCTAACAAAATTTAAATAAGAATG
ACCACAAATCCTTCACAAGTTCTTCCAGAAAGAGAGAAATTTGAATTTTCAATTCATTGTTGGTGGTAAATAAATAG
CGCAGTCTCTTTGGAAAGCTATTTGGCAGTTTCTGAAAACATTAATTTCTAGAGCTGCATATGACCCAGCAGTTTGTG
CTCCCTAGTATATATCCAAGAGAAATACCATATATCTACAAGAAAATTTTACCCAAATGATCATAGTAGCATTATTTA
TAATAGCAGAAAAAGAAAACAACCCAAATGCCATCAACAAGTGAGGTGACAATCAAAATGTGATATATCCATACGGTG
AGGTATTATTGAGAAATAAAAAGAAATAAAGTATTGATATATGCTACAACATGGATGAACCTTGAATAATTATGCTTA
GTAAAGGAAGCAAGTCACAAAAGACTACTTCTTGTATGACTCAATTTATATGAAGTGTCCAGAATAGACAAATCTATGA
AAGTTGATTAGTGTCTTCCGACAGCTGGGAGGTTTGGGACAAGAGGGAGTGATTGTTAATGGACCTGTTGTTTTAAATG
TTATTGATTTGATTGTGTTGATGGTTGCATAACTTTGAATATTGTAGAAACGACTGAATTGTACACTTCAAATGGTATG
TGAATTATATCTCAAGAAAATGTTTAAAGTAATGTGAATATGTATGTTGAGATAGCATGGTATGTAGAAGTTAT
GCAGGGGAGTGGTTAAGATCATCAACTTGGGTGAGAGTGCCTAAGGTCAACCTCACCATAACAGTTGTGGGAACCTTACA
GCTTTCTTAATTTCTCTGTGCTCAGTTTCTCCTGTAAGCATAATAATAGTGCTTTATCATGGTGTCTATCTTTAA
CATTAAATGAGCTAATATTTGAAAAGCATTAAAGAGTATGTGGCACAACATAAGCACTATATAAGTGTTTGAAGAAAT
AAATAAATATAGGAAGACTACAATATTTGTTTCTTGGAAAATTAACCTTTATTTCAAGAGTTTGATCTTCTATTCTAT
TATGTTAAATTTCCCTTTGTAAAAAAGGAAATGTTAGTTACAGTAGATGGCAGTTATTTGTAAATATCTTTAA
TTTGCTAAAGGAACAGTTGGCACTTCTATATTGATCTCAAAGTAATTTTAAATAATTTTGAATTTGTACTTTTCCA
TGAAATCTTAAATTAGAGAACCACAGTTCTATAACTATGTCTTTGTTCACTGGCCTTTGGAACAGATGGCTCAAAAAA
TTAATAACCATTCAGTTTAAACATTAGAAGAGTATTACAGATATTACAGTACCTAGAAAAAATCTTATCATATAGGAG
ATGTTAATGAATGTGCATTGGAATGAATGACAAGAATGGATCATAAGTGTGTGACTTGCTCAGTGTGTGTGTGTGTG
TGTATGTGTGTGTGTGTGTGTGACAACGACCTCTTCTACTGGTATCCTAAAGTCTGTATAGTTATATCTGATATGCTTGA
GTTTGCATGTTTCTGCTAACCTTATTCCCATGAGATTTCACTTTGAGGTATTTATATGGATTCTAATCTTGCAGCTAAG
TTTTAGAATCCAATCCTCAAAGTATTAAGGGATAATTGGGATTATTTAATACCCCTCCCCAATTTTCTGTAATGTTTT
CTATTAGTAGTATGGCTGCTGCTATGTTTGCATGTGTTCACTATTTTATTTCCAATTTCTATTACATTTTATTTTTC
TTCTAGTTTCTGCAGACTATTTAAATAATTTTATTTGGTCTGTCTCACCCTCTGTGTTGGCACTTTTAAATATCTTTAA
GAGAACTTGAAAATATTTAGCTCCATAGAGCACGTTTTCAGTTTACCTTTTGTATTCCATAGCCTGGATGTAAGGCTT
CTTTATGTTTTGTGAACAGTTAGAACCACACTGACTGCTATGAAAATGCTTAGTAATAATTATGCTTCTCTGGATCCTTG
TGAAATAACCTGCTTTACTCAATTTAGTACACAAGTATTGAGAAACATCTATAGCCTTTTTCATTGCAGTGTGGGACA
GTAGTTCACTGCATAGGATCTGAGGCGCTGTCACTCTTTCTGATGTCTCAAAAACATACCATTTGATTGTTTCTCCCA
AGTCTAGATTTACCAACATGTGAGAGACTGATGCTGCAGTGCCAGGAGAATTATTACTGATCATAATCCAAGAAGAACT
GACCAGAGAATTAAAGCATTAAAGTTGCAAGAAGTAGGTTTATTTCTGACTCAAAAAGGCTTAGTATAACCTACTTG
CACCCCTGTAAGCATCTAAATTATTGTCTTAAGAGAACAGAACCATAATGATAACCACAGTATTGCTTAATATCTGCTG

90/375

[illegible]

91/375

[illegible]

92/375

CCACAAGGCCCATATAATAACATATGAAATGTTTACTTTTATTAGTCATCAGAGAGATATAAATTTAAACCTCATTGAGA
TACCACTATACATTTTATGAGAATGGCTAAAATGAAAAGACTAACTATGCCATGTATTAGCAAAGATAGATATGGAGCA
ATTATAACTCTGGTAATGGAAATGGCATACCCAACCTCGGAAAACGTTAGTATCCCTTAAAGAGTTGAATGTACATCTA
CCCTATGATCTATAAATTTCTATTCCTAAATTTGTATTAGTCATCTGGATAACAAATTAGCACAATGTTAATGGCTTATAA
CAAGAATAAACACGTATCATTTCAATTTCTGGGGAATCAGTAATTCAGATGAGGGTTTAGGTGGTTTGGACTCAGAGTC
TTTCATGAGATTTAGGTAATATGTTGGCCAGGTCTCCAGTCCCCTGAAAGCTTGACTGGGGCTGGAGGCTCTGCTTCC
AATACAGGTTACTCATATGACTAACAAATTGAGGATGACAGTTGGCCAGAGACCTCAGTTCCCTTGCCATGTGGATCCCA
TATAGTGCTGCGTGAGTGTCCTCCTGGAAGCTGACGTGCCCTGGAGTGAATGATTCAATAGAGAGCAAGGTGGAAGCTT
TTATGACCTCACACTCAAAAGTCATACTCCATAGTTTGTGAAATATCCTATTAATTTTATAAATTAGTCCTATTGAGTG
TATGATGTATGTATGTGCGGGGAGAAGGGTGTGGCTATGCAAGAGCATTGAGATAAGGAAGCAAGGACTATTGCATGCT
GTTTTTGGAGTCTGGCTACCACACAGGTATTTATCCAGGAAATGGAATGAAAGTCCCTCAAAACCTTGTACAAGAAT
GTTTCATAGCAGCTTTATTTATAATAGCCAACTAGGTAACAGCCCGGATGTTTACAGGAGTCTGGATAAAACAACTGTA
GTATATTACACATTGGAAAATGCCCTCAGTGATAAAAGAGAACCTACTAATGAATGCAATAAAGTTAATAAATTTAGAAA
TATTATTCTGAGTGAAAGAAGAAAAGATAATATATACCATATTATTCGACTTGTATGCAATCCTAGAACAGGCAGAAC
TGTAGGTGATAGAAATCCTATGTGTCTTCTCACAGGGATAGTAGGCAGATTTACTGGGAGTGGGTAAAGGAAA
CTTTTGGGGTAATGAAAATATTCATCAAAATTTATCAAAATCAACTCAACAGTACACTTATGTTCTGAAGATTATATGT
AAATTATACCCTGATAAAAAATACAAGGCATAATCCAAGGAACATGAAAGACAAATAAGCCATATAATTGATAAGAGAG
AAATTAATACAGAAGGGAAAATATTAAGGAGAACTAAGGTACATATATTTTTCAATAAGTAAACACATGGTAATT
GTAGATAATTTAATAATATCTTATTTTTATATTATAATCTCCACTTCTGGAATAATTGTTGATTTATTTTATTTTGA
TGTACTTCCCAGTCTTTTTTCATGCATTTTAAAAATAAATAAGAACGTTTGGTATTTGAGATTTTGTAAATTGATTGTG
TTTGTGTGTGTAATGTGTGTGTATGTGTGTTGGCTTACAGTATAAACAGTCCCTCCAAATTATTAAGACTATTT
TTAAGCATCACTTTCAATTGTTATATTCATTGTAAGACTATTTATAATTTATGTAACCGTTCTGTTACTGATAGACCT
TTAGGTTGTTTCTCATTATTTAAATAATGCAGTGGAGTTGTTTATAAAGGGTGATCTTTAGTGTGAGGATTATTTCT
TGGGCTAGGGTTTCCAAAACGTTCTAGATCAAAGAATATGTTTACATTTTCATATTGCTTTCTACAGGGTTTAAATTA
TTATACACATTTACCAGTAGTCTATTAAAGGACTTATTTAATAGGTAAGTGAAGTAGGTATTTCACTATGCTTTTGATA
AGCATAGTAACACTTTGTTTCATGTGTTTATTAACCATGTAAATGAGAAAAATGGCTGAATTGAGCCTTAAAGAATGA
ATAGCATTTTAAATATCAATTGAAGCAAGATGGGGAAGGTTTTTCTGCAATGTTTCATGGCATGGCAAACAAAGTCA
TTCCATGTCAACCTCATGGAATTGTAAAGTCAATTAGTATATAAAGCTTAGAGCAGTTGTTCTCAGTCTTGGCTGCACAAT
AGGATCACCTGAGGGAGAATGTAAAAATCTCCAATATCTAGGCTTACTAGACCAATAAAATCAGGATAGTTGGGTGAA
GAACTCAGGCATCAGTAGTTTCTAAAAGTCCCCAGGTGATTACAAATCTGTAAAGCAAAATGTGAACAGTGGTATAGAG
TGAGGTGAAATGGGATAGGTTGCCATTAGAGATGAAACAGAAGAGATGAAGACCATATGTAGCAAGACACAAATGCTCTA
GGATAAATTGTATACTTCTGGGCAAATTAGCAAATGCTGTTAGGTTAGTGTCCCTTTCTTATCATCTTGGAGTCCCTT
ACCTTTTTTCATGCACTCATGCAGTGTGCATTACTCCCAACCAACAAGTACACCTGATCTTGTGGACAGGCTGCAAGCA
AACC GCCCCACTGCCACCCACAAGCCTGGAGACCTGGGAGTTTTTCTCCACACCCCCAGGACATAGGCCTGAAGCAA
TGATTGCTGATGATATGATATAAGTAATCCAGCTTCCTCTTCTTAATCAAGATAATTCTGACATGTGAACATACTAG
TCCATTCAAGTAGCCAATATGCAAACCTTTGCCTTGTTATCTAGGACAAGATGAGCTTGTGCCAGAACATAAATCTGTAT
GCTGCTTCCCTTCAAAAGAAATGTTTCTATGAAAGAAAGGTGAGCTGAAGTAAATAGTGGACTTACTGACTTAGCTGCA
AGCATCTTATTTTCATCATGGAACAGTGACACAGACCAAGGATCTGCAAACCACACTTTGCGTGCTCTGCAGCAGTGAAC
TCATTTTTTAAATATCCTTTTCTTGCCATATCTAAGGTCCCGGCTTAGTTTAGATGCCCATTAGTTTGGAGTTTAGA
ACCACTGGTTTGCATTTCAAAACGTAACCAAGAACATGCCAATATTTCAATGGAGATGGTAGCTTCCCTCAGAATTTG
TAACTGAAATTCCTTTGTGAGATATGTGTTATTTACTGTAGACTTCATAGCTCATAGACTGATTCTAAATTTATATTT
GTAAGGTAACCTTAGGTGATCTCCACNTATCTGACGTGGAGCAAGTATTGAAAACCTTTCTGGTGCTCAGTTTCTCACTT
CTTGAATGAGGAAAATGAACATATTATTCCTAAGTCTCTTTTCAAGTCTTCTTCAAAATGTTATGTTCAACAAGAGCTACTAG
ATTATGTCAGTGAACAAACATAAAACAGATTATTCAGTACGAATGTCACCTTCTCAAAACAAATTGACAAAAGTCAT
ACATCTATTGTAACAACAATTCTCCAGGAAGCTAACCTTTGCCTGTTTTTTCATAAGGATATGTTTACTGCTTTTAACTT
TGCTTTGGAAATGGGTAACCATCTAATTAGGTTGATAAGGTCAACATGCAGGAGCTTTGGAAAGAGATTGGATAATATT
TGTGAGTGTGTATATTGCTTAGACATGCTTTTTGTCAAGTTTATTGTACTTTAATGATTAGCTAGAAATAATAAGGCT
GCTGTATATGCTATTTTATTAATGCTGTGTATGTTTGGGTTTTTTCGAAGGTAATTTGAAAATACAGAGAAAATATAAT
TATTTGAGGGTGCTTTTAGAAGAGGTGGATATGTTTATAAAATTAATAGTAATTTAATAACACAATACTTCTCAAGAC
AGAATTCACAGTATACATGGTTTCATAGAGAGGGTTTGTGGCACTGAATGAGTTTTATTTTCCCTGATTTTCAAGGAGC
ATGTAATGCAATTTTGGTGTGATCTTGTGGATCAAGAAAGATGATTTTAACATATGTAAATCATTCTGCTCATCAGTT
TGTCACATCTTGTCCCCAAACAACCCTAAAATAGTTCAATATTTTTTAGACTCTTTTGTGCTCAACTTATCTAGGAAG
AAATGTGGACTTCACAGTCATATCACAGACTTTCCATTTGAAATGATTCTCAATTCCATTCTCTTCTGGGCTCTTACAC
TTTTGAATCCTCATAAAAACATGGGGAATTAGGACATCTGTGTGGCATTTTTTAAATTTTATTCTTTTTTTTCTTAAAGT
GAGGTATAATACACAGATAGGAAAGTATATTGATCTTAAAGTATACAACCAATGAATTTTTACATATGTGTACACTAGT
ATAACTACCACTTGAACCAAGATATAAAGCAAGATTTAAAAATCTCTTCTCATCCCTTCCAGTTAATTTTCTCCAT
TTAGAAGTTACCACCATTTTGACTTCAAGCACCATAACTTGATTTTGCCTGTTCTTGTCTTTCATAGAAATGGAATGAT
ACCTTATATTTGCTTTCTTTTGTCTCAATATTGTGTTTGTGAGATTGATGTGATTCTTGCCTATGGTATAATAAATAAT
CATTAGCTTCATTTTACTGTGATGTAATACTCTATGGAGATTTCAATTTTACTCTTGATAGATCTTTATTTTCATTTTT
CAGTTATGAATGTCTGTTGTGATTTTTGTATGAATACATCTACTCATTTTCTTTTGTGACATAGCTAGAGTTAACAT

93/375

GGCTGGTTTGTAGGGTAGACATAATTCAGCTTTAGTAAATGCTGCCAAAGGATTTTACAAAGTGATAGTACTAATTCT
ATTTCTACCACTGATGTATGAGAGCCCTAGTTCTCTGCTTTGTGCCCATATGTGATATTGTCAGTGTCTTTTTCATTTT
AATGATTCCTGGTGGATGTGTGGTAGTATCTCACTGTGGTTTAAATTTTATTTCTCTAATTAATAATAATATCCTATGC
CTTTTCATATGCTTACTGGCCTTCTGGGAACCTGTTATATGAAATACTATTCAAATTTTTAGCTATTTTCTTTAATT
GTCCTTTTTTGTGTTTTGATTTGTTCTTTATGTATTCTGATAAATATGTAAAAAATCAAATTAACAAGTATCTGATTCC
AGTCTGTGTCCTGCTAGTTTTTTTATTAATAATTTATTTTGATGAACATAAGTTATTAATTTAAGGAAGTCTAATTTAT
CACTATTTTCTGTGATTGTTTCATGCTTTTTGCGTTGTGTTTTACTATGTGATTGAAAATCCAGTCCACCACAAAATGCA
TTCAAATTGACAGATGCTAGGTTTGTCTTTCCCATTAATAAATTTGTAATATTACATACATAAAATTTACCATCT
TGGCCATTTTTAAGTATAAAGTTTAGTGTTAATAAAACATTCATAATGTTGTAAACCATTAATCATTACCCATCTCCA
GAATCTTTTTTATTTTATAAAACCAAACCTCTGTATTCAATTAACAACAACCTCCCATTCCTCTTGTCCCCATTGCTCT
GGCAACCCCTGCCAATTTTCTGTCCCTATGATTTTGTACTACTCTAAGTATGTAATATAAGAGGAATTATACAATATTT
GTCTTCTGTGCACCTGGTATAATGTCTCAAGATTTATCCATGCTGTAGAATATGTTAGAAATTTCTCTCTTTTAAAGG
CTGAATAATATTCCATTGATGTATATAACATACTGTGACTTAAATCTGGCTTACCATGTTTGTCTATCCTGAAAAAT
GTCCCATGTGCATTGAGAAGATGTATATGATGTTATTGTTGGGTAGTGTCCATACCTGTCTATTTAGATCAAATTTGGT
TATTGTGTTGTCTTTTCAATTTTCTTACTTGATTTTCTGTCTGATTGTTCTATCCATTAATGAAAGCAGAGTATTAAAGTA
TCCAATATTATTATAGAAGTGTCTATTTTCTTCTCAGTTCTGTCTGATTGTTCTATCCATTAATGAAAGCAGAGTATTAAAGTA
TGGCATAAATGTTTAAATGGTTATATTTCTTCTCAGTTCTGTCTGATTGTTTGTCTCATATTTTATTGTCCTATTGG
TTGCAGTTTTTTTGTATTAAAGTTTATTTTGTCTTATATTAGCATAACCACTCTGCTCTCTTTTGGTTAACTCTTTTAC
ATGGAATATTTGTTTTCATCGTTTTATTTTAAATCTATCTGTCTGTTGGATCTAAAGTGAGTTTCTTGTAGATAGCGTA
TTGTTGGATTCTGTTTTTAAATCTATGCTGCCAATTTGTCTCAATTTGATTGGAAAAATTAATCCATTTACATTTAAAGTAT
GTAATCACAGGTTGAAATAAAGAAGGAAGCAATTTCTCAAGAAGTAGGTATGCCACTACCAAGAGAAGGGAAATAAG
GTGCTGGGCAGACACAAATAATAGATGTCTATTACAAAGGAAATAAATGCTTGACTCATGTGAGCTGGTTGTTGAAA
GTCTCTGGCTCTCAGAACTGGGGCTCTATAGAGGATCACTGCAGGCCCTAAGCAAAATAGAAATACAAGATGCAATTTCCA
GACTCTTACTTGAAGTCACTTTTCATGGGGTTTTAAGGCCAAAGGTGGATCCCTATATTACATCCATCAGAATAAAGCG
CTATCTGATTTTCTCTTACTGGTTCCAAGGAGATGCTCTGTTGGTAAAAATAGGGGCCCCAGAATCTCCCAAATTATCA
CCCTTAAAGATCTTGTGTTAGTAATTCATGTTTAAATTCCTTTCTCTTCTCAAGTTTCTCCAACATGAGTATAAAATTC
TTATGGCTACAACAGCATTTAGATAATTGATAACTGTGACAGATAAAACAACATAGTTGCTTTTGAATAAATTGCTACTTC
TAGTATTAACCTCTGTAGCAATAAGCACTTCTTAGGGAACCTATTCAATTTCTATTTCTATTTATATTGTTGGGATA
TGTGATTCTCAAACCTTTAATCATGTGTACAAATCATCTGGACGGCTGGTTAAGATATAGATTGCTGGGCCAAATCTCTCA
GAGTTTATGATAACATAGTCTGGGATAGGGCCCCAACATTTAACAAGCTCCTAGTGATGCTGCTGTTGCTTGTCCAGG
GATCACACTTTAAGAAGTAGATAAAAGATACGTCCCTAAACATATTAACATGAATAAGTCTTTTATACATCATCTTTTGT
TCTCATTAGGGAACCTTTCAATTTAAAGAACTGTATTTCTTTGGAAAAATAAAGAGCCTTTTATATAAAAAATGAAAA
ATTTGCTCCTCAATTAATTTTGAATTTTGTGTTGTTGAGGGTTGGGGTAAGAGATAGATTATATATCAGATTAATT
TCTTGAGGCCATGCATCTTGCAGAAGGGAAAAAATCCTCATAAGTAGCATTTTTTAAACACAAGGATAGTTTTTTA
TCCCATTGCAAGTAGCCTTAACCTCTGCTCTACAGTTTTTTTATCTGTTTCAGCCTAATCAGATTTTGTGGTTGGTTGAT
TTTTCTTTTATTTACGTGTTCTTGTGTGTATATACCAGATACCAAATGTCTTTAAGTAGTATTTCCAATTGGGATTAA
AAAGGTCTGATTCTAAATCTGTCTAGTTCCAGATTTGGTCCGCAATGAATCATAGAAATCGCTACAGAGGAGTGAATC
ATACTGCTCTCTTTCTATCAGTCTAGGCAATAATTTTCAAGTTACCTCATAAATTTAAATCTGGGAGCAAGAATT
TTTTTGGTAGCAACGTTGCATCAGTACTGACATACAAGAGATGATTCTGAGAGTAGCATGGGAGAGAGGAAGAATACAG
ATTCTGCAATAATACTGTATCAGGTGATATTTTCTTCACTGTTACATTTTCTGATGATGGAATTTAAGTATTGAGT
GGCTCAAGGACTTCTGGGGCACAGAGATTCCACTTTAGAAGCTTTCTTTCTTCTTGAACACTTTAGGTTTAAATGTCT
CCTTTTAGGACAACTCCTGTTTGGAGTATGGTATTTTCTCTATTCTAAGTAAGTATTAAGAATCAATAAGGGCCTCTG
TCTCTGTTTCACTTTTCTGAAGGACCATGCACCATGGTTAAATACTTGTCCATAATATGTCTATGATAGTGTGGTATGCC
TGCTAACATCACTATTTTCACTTTTGCAGTTTCTAATTTCTGCCCTAACAAAGTAATCTTTAATTTCTTCAAGTATTAA
GATAAATAATATTATTAATTTGGTATCTAGTAGTTATACTAAATTCATTTTTTATTAAGTTTCAATACAGTCCCTGTGTT
CACCACCTTACTCGTAGGTAACAAACATGGGGCATCTTCATTTAAATCAAGTTTAAAAAATATTCTATAAGTTTGAAT
ACACACAACTAGAAAGTATTGAAGATAACACAAGAGAAAGATTGTCAAAGTATCCTGTCTCCTTTCTATGAATTTGCT
GGAGAAAAATAGAAAAGTGGACTAGGTCATGAGCAGAATTGAGTTTGTGTGTATTTTCAAGGACACCGTTGACGTTTCTTGT
GCTTTAAATGATTTAGAATGGTGCCCTGGTGGTAGAAAACCTTTCTGGAGGCTACATGAGAAGTGATCTAATAAAGTTTT
CATATGTATGTACTCTCTCTCAAAGAGAAAAACATTTTATTTGTGATCTTAGCATCTCTCTCAAGGAGATGATATGGAA
GTTGAGCGTCTGCAATGGTTTCGTAAATTTGAGGGAAGGTTAATTTCCACCTTGTTCATTTAAGTATCATGTACTATGAT
AGGCTCAGGGGAAACCAAGAAAAATTTCACTTCCCATGACCTCAATTAATTTCAATTATAGTGAAAGAAACATTAACA
AAATTATAATACATTAAGATGATTATTCTAAAGCATTACAGATAAAGTCTATGGTGCCTACAGACACCTAATCTCGC
TGGACGAGTCTGAGAAGGCTGCATAGATTTACAGGGCAATTGAGGGCAGAGGGAGGCTAGGAAAAATGGAGGACAGGT
GCCAATGACAGAGGCATAAAGGAAGACTGGCTTGTCTATTGTGTAAAGGTGTAGCAGAAACGCAGCAGCCAAGGCTACTC
TTGGAAGCAGTGGCTCCATAATGCCTGGCCTTATTGACTATAAAAAAAGTTTAAAAAATTTATTCTGTTGTCAACGG
GGGAAGAGAAATTTTGAAGAAATGGAATGGCAACTTTCTAGCTTTTACAGAGAATTGCGAAAAGAATCGGGAGGGGAG
AAGAGGTAGGCTTCCAGAAATGACTCCAGAAACAGACCATCCGACTGGTCTCAAGAGAATCATCCAGAAAGGCTGCCC
GTGAACCTTTGGAGTTCAAGAACGTATAGTATGATGGAATCCTGGGAACAGGAGGCTGCCACCAACATGGCTGTACA
ATCTTTCAGACACCATGGTGTCTAGTACTCCACACAGGGCCATTGCTGCCCCAACCTAATTTCCACACCCCTATTT

94/375

GCCAGCAACAATAACCAAGCAATAGGAAAATAGCCCCTGCTTCGCTTCTGTCTGCCAGCTGTCTCACTAGAGCACATG
AAACTGGTGGGAATCTAATATGTATTTGAACTCTTATCGCAAAGTAGTCTGATAATTGTAGTTTTTCGCTTTCCAGACT
CCACAATACAGGTGAGCTCTCTGGAAGAAGGAGAAATTAATGTTGAGGACCAATTCATCATATATACTAGACAAAAGA
TGGATGACATGGATAAGGAAATCTATAGAGAAGAGAAGCACCTGAGAACATGAACATTCAAGGGACAATTGAGGAGACT
AAGGATGAATGGTCACGGGGTCAAGGGAAGAACGCAGGAAAATGTAGCATTATGGCAACCAAGAAGAACAAGTTTA
GGAAGAAGGAAGTGGATAATAATGGGAAAATGCTGTAGTGCAGCAGTTATCAATTTTTGTAGTATGACATCTTTTCAGT
AACAAAAATCTGTGTACCCCTAGTATTAGGCAAGACTTTGTTACAGAAAATCAACTTAAAGTCATTTATGCAAAAAAT
GAATTTATTGACACATACAACCTTTAAGTGCAGTGGGGACAGATCTAGCATTAGCTGCTTAAAGTGGTGCAATCGGGTTAA
ACCTTTCTCTCTCCCTCTTTTGCTTTGCTTGTCTGCCCTCTGTATTGGCGTCATTGTTAGGCAGGCTTTTTCCATGAAA
CTAGGAAAAACTGAACTCTGGAAACCAGACCTACATATTGCTTACAACCTCTGATCCCAAGAAGAGAACTTTCTCTC
TTCTAGTATCCCCAGGTCAAATCTTAGGGAAGAGATTGATTGGCCTGGCTTAGGTCAGGTGCCCTTCTACTGCACCAATC
ACTTGCAGGCTGTAAGCATAGAGTGCTCCAATTGGCTAAATCTGGGTACATGCCCATCTGCTGGTGGAGGGAATCTT
GTCAGTCACACCCAAAACATGGAAAGGATTTTCCATGAGAATCACAGAAAGTTATGATTTTTCTATTATAAAAAGAGA
AAATAGAAAATGGATGCTAAGCAGGCAAATTTACCAGTCTGTGACAGTTCCACATAAGAATAATTACATATTTAGATG
TGTTACTTGAGAAAAAATATATATATAATGACAAAGAGCTACTATGAATTTAGTGACACTTAAAATAAATTTCTAAA
ATTCTAGATAACAGCTGTCTATGTACATTTAAAAATTACATATATATGCAACGATATCTTCCTTTTGCAAGTAATGCTTG
GGGAGCTTCTAGATTTATGAGCCTCTTTTCAGTCACTCTGAAGCCTCCAAAACACAGATTTCTTGCCCTGAAATTAAGTT
AATCATGGATTCAAAAAGTAGCCTATGCACAATTTTCAGGTGTTCTTACATAAAGACATGCTCAGGAAATATTTTAAGAC
ATTTTCATTTCAGTATATAGAGTACCAGTAAATACTGTACCTTCAGGTGGGTGATTTGCTACCACCCAAATAGCTAATTT
AAAAACCAAAATAAACACGAAAATGAGGGTAGGGTAGGGAAGCACACAGTTTCAAGTAACATCTTCTTTTAAT
TTTTTCTAGTCTCTCTCTTTCTGTTTTTCTATTTTAAATATGCATATGATGCATAGACAACAAATATGGAAACATTAAA
TGAGAAAAAATATATAAAAATGTTATTTCATATAATATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATA
TAAACATATATACAAATAAACATTTGTATATATACATTATACATATATATCTATATATATATTTGTATATACATATAT
ATATTCCCTACCCCAACCCCAAGATTCTTAAAGCAAGTAGCTTTCTCTTGAGGACAGCTTAGAGACCTGTGCCATAT
GAAATGGGATCTGGACCCGCTCCCAAGTGCCTGTGAAGGGTGTCTGTACATTAGCTCCCAATCTGCAAAATGGATG
TTGCTTGACCCGTTTTCTTCCGCTCCTGGGAACCTGGTTAAAGTCCACACAACTCCTTCAACCTCCAGGGACAGAAA
TGGCATCTACGAGCTAATGTGAGGGTCCCTGGGTGCAGAGAAATGTATTAGGAGCTGTGTTCCGGAATGACGGTTTCG
TTCTTGGTCTACTGAGCGTCAACGAGCTCGGAGGACCTCTGTCTATTTCAGCAGAGTGACAGGCTCAATGATTCCAG
CGCCCAAGGTGGAGAGAAAGCGGCTGAGGGGCTTGCCGCTCCTGTGCGCGCCCTCAGTCCGCCCCAGTCCCCTGCAGG
CTCAGCGCCAGGCTCTCCGCCCCCGCCAGCTGTGGCTGTGCGCTTCTCAGCTTGGGCCATTTGCAAGTGGCCCTGCTG
CCATAAAAGAGCATCCACCATTAGGATGGAAACGCAGCTGTTAGAAAATAGAAGCACCAGTGAAGCTGTTCTTGGTCC
CTGAGGCCACCTGCTCATCTTCCCTACATTGTAGCCTACCAGAACTACCTGGGCTGTAATCTAATATTTCTGAAAAA
AAAAAAATATTAGGAAACCTTATAAAAATAATACCGTGCCATGAGTATTTACATAAACAGTGAGGTTTGAAATAGGTTT
TAAACAGTTAATTAACATGGTTTCTTAGACATCAAAGAGCTTCCAGGTTAAAAAATTTGGGGAGGGGGGTGTATCCTT
TTTTACTTCAGAGATATTTTGTCTTCTTTTGGGAAAGCCTTTACTATCTTTTGCTAAATAAGCAAGGAGTTGGTCTG
GAATAATTTAATTCGCTTCTTGGTGGAAATGACGCTTTATTTTCTTGTGTTTAAAGGATTGAATGCATCTATGTATTGATT
ACTTTGCTGTTTCAAAGTTAAATTTGATTTTATAATTAATGAGGCTGCTTTCTTTATTTTAGCATGTGGTTTAAAA
GTTGTTTTTTTAAAAAATAAATAAGACATCTCTTTTGGGTAATCAAAAAATCAAAAGCTTGAGGATTTATA
TATAATTTTTCAATTCTCAGTTTATCTTTGCCAATTAATGAGATTTTTTAAAAACCTGGACAATTAATAAAATTTGT
CACAAATAGCAGTTTACTAAAGCTTTGCTTTTATTTTGGAGTAAATTAATGAGATTTAGTACATTTGTTAAGTAGTTAA
GGAACTGGCAGTATATTTTTTTTCCCAATTTAGAATCTACATTGACATTTGTAGATTCTAAGTTAGTATGGATCTCAA
AATTTGTGCTTTCAATTACATTGAGGGAATAAGACTGAGCTGCTGTGTATTTTCTTTTCAATGTATTTTGCC
TTATAGCTGCATAAATAGAAAAGTAATTACTTAAAAATAAGTAATTTACTTACTTAGCAAGGTTTCTGATGGTAGCTTT
TATTAAATTCTCAACTAAGATAATTATTGCAGAGAATTTCCCAACTTAAAGCAAACACTTCATTAGGTTCAAGATAATT
AAAAACACAACCATTTTATACTTGCCTTCATGATCTTTCTGTCTCCCTCCTTCCCTCTCCCTCTCCCTCTCCCTCTCC
CTCTTCTCCCTCTTTTCTCTCTCTCCCTCTCTCTCCCT
TAACCTTCTTAACCTTATCTCAGAAGATGAATACTATGCCCAAACTAGGAAAAAATCCCACTAGAAATGATGTTGCAA
AAATTGCCATAAGATAATGACATTTTACCATCTGTGACATTATCATTATTGATTCTTCTCTATTTTATTTAATG
CCATAACAATAGGCCCTTTGCTGGATTGAAGTGTGCTAAATTTCTAGTGTGTTTGTGTTTTTAGATGAATGGCAGAA
TTGCCAACAGGAAGCTTTTCCAAATCTCCATTGTTATCCAGAGAGAAAAGAATGACATAGCAATGTTTTTAACATTTT
AACAGCATAATTTTCTTTGTCTCTGGAACCGGAAGCTACGTATCATTAGGAATTTCTGATTAATTTCTTAAAGTAT
AAGGGTCTAGTGCTATACAGGGAGCAACCCAGGACCTGCTCATTAACTAAAAAAGAAAAAAGAAAAAAGAAAA
AAAAGAAAAAATACTTTCTTGGGGACAAGCAGGATTTCTAAGGGCTGTGCTGGCAATGTTATTTGACTGTACATAGAGG
TTCCAGCACAGATTTCTCTTCCAGCTCAGTGAATAAGAGTCCAGGCAGCCTGGCTTTAAATCAGTTGATAGAAAGG
CAAAGATCTCAGAAATCTGGTTTTAATTTATCAGCTTTGAGTTGCTTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT
GCCTAACCAAGTGAGGAGGTTTTCTGTAGATCCCATCTGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT
CCTTGTGTCGAATCTCTGCATGCTGGATAGTGTCCCGTCAGGTCTAGGATAACGGTTCTCAAAGGGCAGCCTGGTGCCA
TTGCTAGTCCACAGATAGACTGCATTTTGATGCATTAATGATGTTTAAATACCACAGTGAATATATTTTACTTTGTTAT
ACTGATCATTTGTTGCTGCTTATAAGAATAAATGGGAGACAGGATTTCTGAGGCTGGGTGCTGGGGGAAGCCATTTAAAA
TCTGGCAGCACTGGCGGGAAGCATACCTGGTGTGCCAGGTTGGAGCTGGTGCCCTTTTCTGCCCTTTTTCATGACAC

Fig. 6.89

95/375

CTCTAAGGGGGAGCCATTGTCTGCTATTCTCTTTGGCTTTCTTTTAAAGGGGCTGTGCACCCATAGATTTGCTGTAGC
CAAACTTACAAGACCGTAACCTACACAGTTCAACCCTACATACACCCTGTGATATCTCTGAACTCTTCTCTACTCCTCT
CTTCCCTGCTCACTTGGCCCCAGCTGTGCTTCAGACACACCAAGGTACTTCCAGACACTTACAGGCTTCACTCCTGCCC
CTCCATTAAAGCTGTTACTCAAATGTCGTCTTTTCAAAGAATCTCTTTCTGGGCATGCTATCTAAAATTGCAATCCCTAC
TGCTAATACACTCTATTTTGTCTTTGCACATATCACCATCTCACAGAATGTATTTTACTCACTAATCACTTACACATT
TTACTTATATTACTTATTAACTTAGTATCTGTCTCCTCCCTCTGTAGAATATAAGGTAAATGAATATAGAGGTTTTCTT
TTTGTTCAGCTGTATTTTGCATGCATGGAACAATGCCCTGTCACTTAATAGGTGCTTAATAAGTATCTGAAAGAACAA
ATGAACAGTTAGAAGCCCCGATACATTTATTTCTTAATCTGGTTTATACCCACAGCAGCAGAAATGCTATAATGACTTGC
CCCATTTAAGTTTGGGTCAAAATTCAGTATACTGACTTATTAATGAAGTCATTTGGAATGAGTAAGAGTCTTAGGTCTA
TGTCGATCACACTGAAATAAGAGCAGACCAATTGATTGATTCAATACATAATGTGATTGTTCTATACTTTCTGAACACT
TCATGTAACAGCTCTGTCTAAATCTCAGAATCTCATTCTATATACCTCATCACTGAATATTTTGAATATTGAAGGAGTTT
ATTGGGGAGAGAATGTTTACTATATCTCAATCACTCTCTATATATGATCTATTTTAATCTTATAAAAACAGTGTAATA
ATACATTATTCCTATTTGAACTGAAATCTGAACATCTTTTAAATTACTCAAGGTTTCACAAATTATGAGAGAAGGTTA
TGATCTTTTCAAGTTATGCTGTAAAATAAGGACTTCTGTTAGAAAACAACAAATAAATGATTAGACTACCCTCCATGTT
ATTATCCTCTGTAGCTGAATATTCGTCTTAAAGTAGGGCCCTGCCATGCCATTCTCCTGCTAAGAGTCTGCATTGGT
TTCCTACTGGATCAATCCAAGCTAAGGCATCAAGTGCCAAGCAAGGCCTCAAGCCCTCATATAGTCTCATTTCCCTC
TTAACCATCTTAGGTTATTTACCTCAGCTGCCTGTAAACAAATCCTCTGCTCTAGTCAAGAAGTTTCTCTCTCTTTCTT
TTCCTTCTCTCTTATTAGCCACCCCTCCTGCGTTAGGCACCCGTTTACTAGTCTGCCCTGCTTCAGGGACTTCTTATTT
CTTCTCTGATGTTCTTTTTCAGGCATGAATGTCACTTCTTTTTTCTGCTTATCCATACACCTTATGGACCTATCTGTAA
GATCCACCTGTAAATTACACACTTTGTTTTCATGTCCCTAGCCTACAACAAATAATCTCTCTCATTTTCTTTTCTTAA
TTACTTTTGAACCTATCAGGTGTACACACAATTTATTAATCCTTATTTAATTACAGACTGTAGCATCTATAATTGTT
TCTAGTGTTAGCCTTGCTCTCTAAACAAGATTGTAAGTGCTTAAAGAGATTATGTCTTATACTTTCCCGCCTATACTT
TGTAGAGTAGAGGTTGTTTTATTAAAGAGATGCCCTACAAATACTTGGCTTTTCATCCTGTATAGGTATGAGTCTGCTA
TTAATAGAAACAATGACATCACTTTAGGATAGATAGTAAATGTGGTTTTATCCAGCAGCAGATCCTTCCAATCTGATAT
TAGTTTTATGCATTTTATGAGCACATATTTTTCAGAAAGTCACTGGAAGATTTTGCTTCTGTTATATTTGAAATTTGA
ACACCAAACCTCCACATTGTGAAATGTTTGCATGAACACTTTTGAAGCTTTAGATGAAAGGTGTAGTATAAGTACAAA
GTATGCATCTTCAAAAAGCAAAATGAAATGCAAAATCTTAGAAATTTCAAAAACAAAGCATGGGAAATTTTGGGTATAT
TGCAAGGCCAAATAATTCATCACTTCCATTTCTAGAGCACTTAGAAAAGGTTGGGAAATCTGTCTTTGAAGCCTTAGAGT
ATGTATATTTTTCTCTTTAGCCCTGTGCTGTTTCTTTGAGGATATGCCTGTAGCAATAAAGGTAATCGGGAAGGCTTTG
AATTTCTGAGACAGTGTTAAGCATTTTTTAACATCAGATTAAAGGTGGCAAAAGCTAGGAGTATCAAGGTGACTTC
AAATCAGGGGTTACATTGCAAGTCCGTCTTTTGGATGAGATAAGTCAAAGTGCCAGTGAATGTGTTTTGGTGCCAGAA
AAGAAGCTGAGAGGGTCAGGATGCAGAAGTCAGCATTTTTTCAAGAAACACTGGGATAGAATTTCTTTGTGTGGAAGT
TACCATGTCTGGAGATACCTCACTTAATGACATTAGTTGAATACTGTGCAGTTTGTCCAATTTTCAAAATGAAGTACAT
TTATGATTTTTCCCTGTGCATGCATATTTATTGCTTTTTCTTTTTTTGTTTTATTCTTTGAGATAGGGTCTCAATTTGCT
GCCCAGGTTGGAGTGCAAGTGGGGTGATCTCCGCTCACTGCAACCCCGCCTCCAGGTTTGAACAACCTCTCTGTCTCA
GCCTCCCAGTACTACAGGCACACATCACCACGCCCTGGCTAATTTTTTTTTTTTTTTTGTACTTTTAGTAGAGACGGGGTTT
CACCATATTTGGTCAGGTTGGTCTCAAACCTCATGACCTCAGGTGATCCACCCGCTTGGCCTCCCAAAGTGCTGAGATTA
CAGGCGTGAGCCACCATGCCCCACCTATTGCCTTTTTTCAGGAAAGTTTTTGGAGTGTTCTGAAGGTTGGGGAGGATCCA
CATTCTCTATCTTTAGAAGCTTTCTCTTTAGTGTCCTTTGAATGCTGGCTTCAGTTCAAGTGGAATAAGGTGGATCAG
GCTGGGTGCATTTTAGATTTTGTGGTATCAGAATTTGAAAACAAGATCTGCTCCAAGGGTAGGGGCAGGTCCCACTGG
TAGAGACAAAAGGATGTTTTGCCAGTTTGCAGCAGAGTGCAATGTACTGAAAGAGGAGTGCTAAGTGCAAAGTTGCAC
ATCTAAGCCAGCTGTCACTGGGCAAAAGTCTGCAAAAGTCTCACAGGTGGCACCCTATGGGCCGGCCATCACAGGAAGA
CAGAGCCTGAGTGTGGCCAGTTTGTGGTGCTCCAGGCAGTGGGTCAAGCTGGGCTCAAGTAGGCCCTGGCAGCTGAC
AGCGGACCTAGCCTTTGAGCTGGGGATCAGAGTTGCAGGCTTAAAGGAGCTCTCAGGCAGAAACCTGGAAGACAAGGAA
GGTGGGGGAGTATGATAAGGACCAGCTGCTGAAAACGGGGCACACGCTGCTACAAAATAATAATCCCCACAGATA
ATAATAATAAGATAGCTAACACTTATTGATGCTTACTATATGTGCAAAAATGTCCAGGTCTTTCACATTTTAACT
CTATCAATCCTTAAAGGCTGGTACTGCTATCATCCCCACCTTATGGGGGAGTAACTGAGTCCCAGTAAGGTGGAATAG
CATTGACAGACTACACATCTAATTAGTGGTAGAATAGACATCTTAATCCAAGCATTTCTGGGTTAAAAAGTCTGTGTGTT
TATCCTCCAGGCTATCCACCTTCAAGTACTAAAAGGTGATACAAAATAAATTGAGTCTTTACAGTTTATTGGAAAGGG
CAAAAGCTTTGAGCTAGAGAGATAAGGATTTGGATCTCACCTCTACCACTTGTATTCTGACATTTTGGGAAATCAT
GTGATTATCTTAGATTTGCTATATCATATGTAGAATGCGGGAAATGCCATCCAGCCCATTGATTTTGAAGAACTAAGTG
AAATAATAGATACAAGCTAATTAGACTTCATCTGGCAAGAAGCTGCCACTCAACAAATATCTGCTTGTCTTCTATTCTCT
AAATGCCCATTCTGATAGAGCTCTTTCAGTTACTTCCGATTGGAAATAGGATTATCCAGGGCACAAGTCTGGGCTAAG
CTTGAGATAATTAGGGAAGCCACAGGTTTCAACCCTTGTGAAAAGAAGAATAGATAGATAGATAGATAGATGACAGATA
GAGACAGATAGATAGATAGACAGAGAGATAGAGAGATATAGATTAGATAGATGACAGAGAGATAGAGAGATAGCTA
GCTAGCTAGATAGATAGATAGACAGACAGACAGATAAAAGACACCACAGGCTATAGTGAGAGGTGAGACAGCACCCTGGC
TGTTTTCTGCTGCTTACCCTTAAACAATGTGGTGCTTTCTCTTTTAAATTTACAGAAAATGTGCTGGCAAGTGCTTT
TGTATACAGTTAATCAATCAATGAAACTTTGCATCTTAAAGATGTAACTAATGCTCACTTCAAGAAACAATAATTGGC
AAATTTAAAAATTATTCATTTTTTATAAACATGTTAATCTTTTGTGCTTTCAAGATTTTTTGTGTTCACTAATTTGTTAGT
ACTCAGAACTGACTGAAATGATTCTAAGTTTGAATTTCTATAATTATGCTTGAATTTCAAGCCTACCTTGCATAGGAT

96/375

GGTGGCTAGGGCATAAATATTACATCCTATCTCCAGCTTAAGGCATGGATACCTGCACCATCTTTTCATATGAGAAGCATC
AACACAATTCTGACTATAAAATTTTCATGATCATCTTTTCCACCTACAACCTTTTGGATCTTTAGCTACGAATTACATT
TAAAGCTATTACTGTATATACTTTTTCTGTACTTAAAAACATATTTGATAGAAATAGCCCACGTGTTTCGCTGTAGAAAA
ATTAGATTACATTAGGCACAGAAATTAAAGGAGAAAAGCCACCCATAATTCCAGTACTAAATAGTATCAAATTTTGAGG
TATATCCTTCCAGATTATTTTCCATAGATGTTGAGGCATAGTACAGAAATGGGATCACACTCTACATACAGTTTGTAA
TCTGTGCTCCTCAGTCAGCTATTTATTACAATAAACACCTGTATATTGATATACATTATCATCTGTAGTAGCCTCATTC
CATTCGATTTTATAGCGATACTAATTTAGGTAATCTGCTATTGTTAAGTATTTAATTTATTCACTAGGCCGGGCATGG
TGGCTCATGCCTGTAATCCCTGCACCTTTGGGAGGTGGAGGCGGGTAGATCACCTGAGATCAGGAGTTTCGAGACCAGCCT
GGCCAACATGATGAAACCCGTCTCTACTAAAAATATAAAATTAGTCGAGCGTAGTGGTGGGTGCCTGTAATCCCAGCT
ACTCAGCAGGCTAGGCAGAAGAACCTCTGTCTCAAAAAATTATTCACATTGTTTTTATTATTGAACAAGGCTTTGACT
CAGCCTGGGCAACAAGAGTGAACTCTGTCTCAAAAAATTATTCACATTGTTTTTATTATTGAACAAGGCTTTGACT
GTCATCTTTGCACATCCATGTGTCTTTTTTTCATACGTATCAAGGGGCATGTGTGTTTATCAGGCTTTTGATGTATTT
GCCAAATACATCAAAATATCTAGAAATAGCATGCTGACTATACCTCCTCTGGCAATAAATGAGTGCCTCAAACTGTATT
TTTTTTCTTTTTCATGTACCATCTGATAGACAAAATAGGCATCTCCTTATTTTATTATTATTATTATTCTCTCTC
TGGTTGATTTTTTCCATATCATTAATTTAAAATTTTAAATTTATCCTTTTTTGTAAATTCATGATTATTTCTCTCTC
TACTGGGACATATTTTATTTTCTTACTGATTTTAAAGAGTTCTCCATGTTGTACCTCTTTAACTATAAAATATGTAATA
TGTAATATTTTCCCAGGTTGTATTGTATATTTAAATTTTTTGATATATAGAAGTTTTTGTGTTTAAAAATGATTAAATCA
CAGGCTGGGGATGGTGACTCACACCTGTAATCCCAGTACTTTGGGAGGCCAAGGCAGGCAGATTACTTGAGCCCAGAAA
TTTGTGACTAGCCTGGGATCCATGAGGAACTCTATCTTTACAAAATTTTTTAAAAAAATAGCCCAGTATGGTGGCC
TGCACCTGTAGTCCCAGCTACTAGGGAGGCTGAGGTGGGAGGATCACTTGAGCCCAGGCAACAGGTTTGATTGCACCAC
TGCACTCCAGTCTGGGTGACAGAGCCAAACCTGTCTCAAAAACAAATAAATAGATAAAATAAATTAATGAAATCATTT
TATTCATAGTTTATGCACTTAGAAAAGCATCTGGCATATATAGTGCTCAGAAAGATCTTCTCACCCTTAGAGAAATAA
AACGTTACATATATTTTCTTTGAGTATTTCCATAGCTTCTTTTTTCATATTTAAAGTTTGAATTCATCTGGACTTTAT
TCTGGCATAATATAAGTCTTAAGGCTTATTTTCCCAATGATTATCAAGTTGTCCAGTATAATTGATTATCCTGTGTT
CCATATGCTGATAAAAAATGTTAACTCTGTCAAATATCAAATCTTATGTATAGTTGTATCTCTTGGTGTCTCTGTTT
AGTTCTATTGGATTCTCTCTAGTCTGGTGCCAGTATCAATTATTATAATTATTACAGAAATTAATCTCTTGTTAATAT
TGTCTTTAGAAATGTTCTGGATATATTTACATTTATTTATATGAGGCTTAAAAATACACAAGCAATGGGAGACAAGGG
GGAATTGCAATTGGGGGTAAATAAAGCAAGTTTGGAAAAATGTTGATATTGTTGTAGCTGTGTGATGGGAATGTGGGAC
TCATGATCCTATTACTCTGCTTGCATGTATGTGTGAAAGTGACGATAACAAAACCTTTATATAAATAATTAGGTAATA
ATTCAGATCGGAATGCATGTAATTGGAATTGCACATGCTTTCTCTTTAGAAACATGTTTTTAAAAAAGTCTCCTT
TTATGTACTTCAATGAAGTTTGTAGTTTCAATTTCTTTATATAGTCCCTCTACCTTTCTAAACAAAACAGCATACAAAAC
CTAAGAAAGCTTCTTCATGCTAGTTTAAAGTTGTGTGTGTGTGTGTAGCAATTATATTTCAAATTTGTTGGTATATAG
GAAAACCTTGATTGTAATCAACCCAGTTACTTAACTAAAAAATACTCTATTTCTTTCTTTTTTTTTTTTTTGTG
TTTCTTTTTGGGAGGTTTTTCAAGTAGAGATCCTGTGGTCTTCTATAGTGATAGACTTGCCCTCATCTTTCAATAT
TTATGATTCTCCTTATGGGATTTATTAGCTAGCACTTTAAACACATTGGCAACTGAGGGTGGTGGTAGTGGGTATTTT
TCTGCTGCTCCCGCTTTAATGAGAATGTCTTCCATCTTTGATCACTAAGCAAGACATTGGCTATTTGAGAAAGATATG
ACTTTTGGTCCCGTTTTATTAATCTTAAAAATCAGGATTCAGTGTTTAAAGTGTTTTACATGCATTTTAGACATTCTTA
GAAAGGATTATGTGTTTTCTTTTCCCTTGGTCTATTACTTTAATGAGTTATATTAATAGGTTTCTTACTATTAACTC
TTCTCACATTCAGAGTGTGTAACCTCATGAATAATATGGATCTTGTGTACTGTCTTACAGAAATCCCTAAATTGATG
GCATTTCTCATGAGTTTTCTATTGTTTCTTGGCTTCTAAGTGAATTTGGGAGCAAGGAGAGTGAATAAATGGACTGAA
ATTTCTATCTTATACTGGAAGTCTGGCATACTTGCACTGACTGTCTACAGTAGAGTCAAATGTACTGACTGAAATT
CAGCTATGGTTAAAGAAATGTGGCTTTTATTTCTTATAGCAAAATTTCTAGCTCTAGATTCTAGCTGTAGAGCCATGTTT
CCATTAATGAGGTGGGGAACACCCAACTTAAATTCATTTCCGGGATTAGAATAGTTTCTTTGGGTCAGTATGTAA
ATAATTGAAAGTTGAGCTATATATCAGAACTGTTTTCTCCTCTCAATGACTTCTGATGTCTTCCCTAAAAACATAAAA
TAACCTTGGGTGCAGGAGAAAAACATACATATCCTGGATTTATACTTACTAGCCATGTAATCTTGTGATGATTATTTCA
GCTTCTCTACCTTGATTTCTTCATCTGCAAAATGGATATTAAATGACAACATATTTTACAGAAATTTGTGGGAATTGA
ATTAGTTAATATATTTTAAAGTGATTAGAACATTTCTGGTACATAGCAAAATGCCCAATAAGCGTTTGTAAATTATAAT
AAAATTATGATTGTTCTCATAGTGTAGGAGTGAAGTGGACTTTGGTTTCATGTGCCATTTTCCAATTGAGTGCTCTTGG
GATGATTGGTGTCTGTCTCTCCTGCCTCCACTTTGAAGTATCTGAAGCTGGTTTAACTCTAATTCTGTTCTCTTGC
CATAAGCAAAGAATAGGAATTACATCTGTTTTTGGCAACTAGGTTGGCACCCAACTCTTGGTGGGAATATGGGGTCTCT
TTCTTAGTAATATTTATGAATGAGATAATCTGTAACAAATATCTGGTATGGTATGATATGTTGTGACATCATCTTCAT
CTTAGCAGAGTTTGGATGAGTTAGAACTGAAAGACCATTTTAACTAAGTTTCTTTTATTAGCTACTTCTACTTCA
GATATTAAATTTGGTTTTACTTTTTTCAATTTATATGCTTTTCGCTTATATTACTTCTTTAGTGAATTAAAGAGATTTTAA
AGAGAAAATCTAGCTTCTCAAGCATCATTTGCTCTTGAATAAATGAACTAATAAGCCCTGAGATGATTAAAGCGTAG
CCGATCCTTAGAAAAGAAATGCCATTTTCCATTTTCACTAAGAAATTCATCTATTAGCACAATAATTTATGAGATT
TTGCTGTTGTGCAATCCCTCATTCATCCCTTATCACCATTTTGAATGAAAGAGAGCAAAATCTAATTCAGGTGCCAG
ATGGGTGCCACACAAATGGCAATGATTCAGCACAGGCTCCAGTTACAGATACCAAGCTCTGAACAGCTATTTGGATAAT
CAGGAGATCTTGGTGAAGTGGTGAATTTCTTCTGTGTGTCAGGTCTCCACTTGTCTTCTCTATATTCAGAGCC
TTTGAATTTGCTATGAAGCTTGGTATCTGCTTGTCTAGCAGTTAAGAGTTGGTGTCAAAATCACATCTTGTGGAA
AAGTGATGGGTTCAATTTGAGGCTCATTGAATGAGTCTTGAAGAAGGAAGCATCAAAATGAAAAGGATTTCAATCTC

Fig. 6. [9]

97/375

TGAGTATAAGGTTTGAATGTTTCATTTGACCTCACTGATGGCTGTGGAAAAGCCTAGGCTTGGACACAGAACTGAAGG
TTAAATCTTGTACTATAATTGAGTGTCTCTAGAAATTAGTACAGGCTTCTCTCATTTTTGTGGCAGTGTAACAGCAGACTA
ACAATCCTGGGAAGAGTGCATTTTAAATGAAACATTTTTCAGGGTTAGTAAAATCCAGATCTCTAAAAAACCAATG
CTTGCTTACTCTAAGATGAGAAGGATAAGCCAAATTCAGGGCTTCTCATTATGCCACCAGGTTATACAATAAATTTTGA
GCTCCCCATCTACATTTTGAAGGATTAATTTCTAACTGTAATTTACCTTGATTCTTAGAGCTCGCTGAGGCTCTTGGT
GTTAAAGACATATCAGGGGACAAAGTAATAAAAAGCTTACATTTAAGGAGTGCCTTCTTAGAGTTAGGTACAGTGGTTA
TATACGCTGACATGTAAGTTCATCATTTAGTTTACACAGTAGTAGCCCTTGAAATGTGAGTTTTCAGTATCTACATTTATC
TTGATCCTGACATGACATGCAAAAGGGTTAAGTAGTTTCTCATGGCCATAAAATTAGAAAATGGCCAAAACAGAATTT
GACTCCAAATCTTTTGAATATGGAATATGACTGATTCAAAACCTAATATTCCTAGTATTAGTTTTGTCTCTTCATCT
CTCCGAATCAACATCTCTTACATAAATTACTTTTGTTTAGGGGATATCTTAGAGTTCTTGTTTTATAATGGAGTGAGAA
AAAAATATCTCTTAAAGAACAAAGGAATTTAAAACAAGGCACTACATTGAAGGAGTTTATTTTATCTACCACATATACAC
TGAATATGAAAGAAAAGAGTATATTGAAAATGATTTCTCTAATGGCAGAAAAATATTATAATTTATGCTGTACTAGATC
TTGATTTTGTGTGCTTGTATTTTTAAATGTCTATAATAAATTGGTAAAACAGTAAACTCTTGAAAAGCAAAAAAAAAA
AAATCCAAATCTTTGCCCCACTTTTTTTCTGCTGTTATTTTATTTTAAATGTAAAAGCCAACCTGCTCTTTATCAT
CGTTAGAAATTTGCTCCAAACTAAGGGGCATGTACAGTTTTCAATTTGTGGGTGTTAATGACTCCACCACAGTGGGCTC
ATTCCTTGCAAGGGCGCTAACGGGCTGTGCTTCTAAGAGACAGAGGATTGAGAGGTTTGGTTCCTACTACTAGTCT
TTTGGTTTCTTGGCTCTGTTATTTTCTTGTATTATGTTTCTTTTAAATTAACATTGAGTTTCTTCATTTATGCCTTGCT
TTCTCTCTGTTTGTACAGTCTGCCGCAATGACTCCTTGGGTAGCACTTGTTAATTAGGGAGAAATGATAGCTTGAGGG
TACTTCTGACTTACTTGGTGCTAGGATAAAAGTTGTTCTACTGAAGCCGCATTAGAACAACCTTTATGTACCTACCTC
AAGTAAGATCTGCATGATGCTCTACCAATTCCTTTTGTCTCTTTGATCTTTACTTTAACTCTGGTTTATTTTATTTAA
ATTCTCATTTGTGTCCCAATAATCTAAACCAAGAGTATTATTAGGTCTTAAATAAATTCATTGTATTTTCTTAAAGGA
GGCTATTACAGTAGATTTTGTGGGAAAATAAAAATTAGAATTCACGGCTGATTGACTAAATAAAAGCAACTAAAGAAC
CAAAGGGTATGTTGATTTTAAAAGGAACCTCTGAAGGTATCTGGCTCATAATTACCCAGAGATAATAATTTGGTTCT
ATAGCTCAGATTGAGAAAGCTATACATAATATAATGCAGGATCTATAACATGGATTGTCTTTCTCAATTTCTCACTATT
CCTCACTCTCACCTTCTCTCTCTTTCAGCTACCTATTCTATCTAATCTATCTATCTATCTATCTATCTATCTATCT
TATCTATCTATCTATCTAATCTATCTATCTATCTATCTATCTATCTATCTATCTATCTATCTATCTATCTATCT
CTATCTTGTTTTGGCCAGAGAGGCAGAAATGGTTTCATGTTTTAGAACCTAGTTGGTCTCATGATACAAAGTACAGACTAT
GATTTGTAATTAATGATTTGTAGACAGCAGTCTCTACATACATTTCTACACCCTCAGTGAAATGCCATTTCTAATACTT
CTCAAATTTACAAGTATTCAGACAGCAGATTTTACTTTAATATGGGACAAAAAAACATTAAAAAGAATAAAAGGCTCAG
TGCCTTGATGAACTCCACTTTTCTTTGTAGCTAGTAAGCAGCTTGACCAGAGATTTTATGGGAGATCATCTTGCTATCA
TTTTATTTTCTCATGATGACTCAGGGAATTTTATCTGAGGCTCTCAATGGATCTGTTATAGTCAAGCTGATGATGAC
ACATCTCAGAGGCTCATTCATATTGGGCCCTCAGGCCAGCAAACTACGCACCATGCTGTCTCTATGATTACAGGAGAA
ACTGCTCTAGACACCTCCCCTGCCCAGGCAGGAAGGGCACCATAATGAGGCAGTGGGAGGGTGTATGGCTAGGAAAGT
TGCTAAAAGGAAGCTTTTGTGTAACCTTTCTTCTGCTGTCAGGAGGCTAACACCAAGCAAAGTATTATCAAGCAACA
GACCTACATTTATGCAATATTAATGAGAAGGTCCCTGGACTTTTAAATTAGGGTGGAGAGTTGTGTTTTAGAGAGCTGA
AATTATTTTAGGTGGGAGGAAATGGAATCCTGGGAGAAAAGTAATTAATTTATAGCTCAATGACTGAACTGTGCCATTT
TGAAATACTGGTCAAGGTGAGCGTTGAAAAGTGGGTACTCTGGCATTTCCTATACCTTGGGAGTGAAGAATTAGGCTA
TTTGGGGAGCCAAATGATATGCTTGTATTTCCAAAAATGTCATTTATTTTGTAAATAAATTTGTGCTGAAATAAAAGTG
GCTTGTGTTCTCTATGTAAGTGTGACCGCTGCATATTATTCATTCAATGGTCATTTACAGCATACTTTATAGGTGTGG
AATTCTACAGATGCCTTTTCTACAGGGACAAAGTTCTGACTAGATGCACAAAGGAGATGAAAAGAACCGTCAATGTCTA
CTTTCATGTTTCTTTTCCCTCTACGTGGGGAAAAAATCAGTATATGAAATGGCATTGTAATAACTTAAAGAGAGTGT
CACAAGAGCAGAATAACTCGGAACAGGCTTTGAAGCCATTAGGTGTATGAATCATTACTGCTCTCTCGGGGGTCCCAC
ACCAGCTATTCTGAGATTCTGTGAGACACTTAGTGTATTGTGTTATTTGTCTCTGTCCCCACTAGAATGAGAGTTCC
ACGTGGAGAGAGATTTTATCGTATTTATCTCTGCATCCCTGGACCTAGAGCACAGTTCATTGCATACCACAAGTGTC
CAGTAAATGTCTGGTGAATGAATTAGTAAATAGATTGCTGTTATCATTTTGGAGGAAGAGAAGGGAATAGAATGATGG
TTTTATATGGACATAAACTACAAAGGAATGATTTGATTCTTTTTCAGTCTGGAGACAAAATGTGCTTTTCTCTCTTAA
TTCTCTGTTCAATTCAGCAGAAATCAGTAAACATTTACTAAGCATATTTTATGTTGTAATTTGTATATATAACATGAAA
TGTTTTCTAACCTCAAGGGACTTAGAGTCCAGGGCAAGGTTGGCAGTGACGTACAATTAACAGATCATTTTGTATGTA
TTTGACAAATATACTGTGGGAGGCATTTCAGGAGGCATTATGGAGGGAGTAAAAAGGGATGTTAGGTGAGGCTGGCAGTG
GGAATGGGGCTGGGATATTGGGAGAATCAGGAACTCTTCCAGGAGGAGATGACACCTGAGTTGAGTCTTGAAGCAAGA
CATTTCCCAAACAAAGGAAGAAGAGCATGGCTATGGGGTAAAGGAAGAGGGGAAAAAGTCCAAGACAGAGGACAGGGAGG
TGAGAAACCGTATGGCGTATGCAAGAATTACAAGTGGTTCCCTATAGCAAGTGAGTGAAACAATGCTGTGTGGGAGGT
CAAGGGATGATACTGCAACAGCAGACAGGGGGACTCTACTTACCATGTAAAGGAGATTTATTTGGACTTTATGCTGT
AGGGGATAGGCAGCTATTGATAGATTTAAGGTGGACTTGAAGTAGGCAGTATTGGTGACAAGAAGAACATTAGAAAGT
GCCTGAATTTGTGTAGATAAACTCTGGAAGACTGTGGTAGTGGTAGACCCCTCTTAGTGTATGAGATATGTATGTGGC
GGGTTAAAGTATACATATGGCAGCTAAAACAATGAAAACCTAGTGGATTATCAAGAAATATAATCTAGAACAGAGGCTCC
CAAGTGCCAATCAAAGTGGTGGTGCTCTTACCCTTCATGATTATTTATCTGGGGTATTGGTCAAAGTAGATTCTCTGA
GTACCTGTCTCAAAGTCTGATTCAATGGTGGAGAGTCAGCCATCTGCATTTTATGGCATTCCCTAGCTAATTTTGAT
ATGCAGTCATGTTTGGGAAATGCTGATAAAAATAATATCAATGGTATCACTCATATTTTAGATGTAGACAAAATAAGAA
GACCCCGTGAAGTAGCAAGAAGTTGAGCAGTCAGTTGGAGAACCAGCAGAAGACAGAGGAAGAGGGATTTTCTAGAAGG

98/375

CAAAAAATGTGATAGCAGAGAGTTCTAGTCAGATAATTTGTGAAAAGTTTGTAGATTTTGTGATATGGAGGTCTAGG
 ATCTTTAGAGAAAGTAGTTTAAAGTGTGGAAGGAGTAAACCTTGCTTGCAATTGGGTTGAGGGGTAGACAGTGGGAATAAG
 GAGGTAAAGAAAGATAACAGACATTTTTTTTCAAATAGCTTGATTTTGAAGAGAAAGAGAATGATATCTTGAGGAGGGA
 GAACATAGGGTTATAAGGATAATTTACTTTTTTACAAGAGGAGAGACTCAAGAGAGTATTTAGATCTTGAGGGGAGAGAA
 CCAGTTAGAACTAGAGCAGATGGAGGAGGAAAGACAGGCATAGGTAGAAGACAGGACTCCTCATAGGAGGAGAAACACC
 TCACTCATCTCTCAGACAGCGGAAAGGAGGTAAGGGAGAGTAAGCTGGGTGAGGAAGGAAGCTGAGGCATAATTTTTT
 GATGGGATGTTTCAAGAGACATTAAGAGGCTCAAATAGTTGAAAGGGTACAAAGCTGGTTGAACTAAACCTAGGTAAA
 GAGCCCTATTGTTAACTTACTATTTTTAAAAATATTTTTCTTGAAAATTGTGACAGCTTTTTCTTTTTCTTTTTCTTTT
 TCTTTCTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGAGACGGAGTCTCGCTGTCGCCCAGGCTGGAGTGCAGTGGCGCAATCTCG
 GCTCACTGCAGGCTCCGCCCCCTGGGGGTTACAGCCATTCCTCTGCTCAGCCTCCCGAGTAGCTGGGACTACAGGCGC
 CCGCCACCTCGCCCGGCTAATTTTTTGTATTTTTTAGTAGAGACGGGGTTTCATCTTGTTAGCCAGGATGGTCTCGATCT
 CCTGACCTCGTGATCCACCCGCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGCGCCCGGCCTGTGAC
 AGCTTTTTCCACCATATTGCATTTATTTCTAACTTATAATAATATGAACCTATTTTTGTAGATTGAGCTCCTGTTGGT
 CCTATAAAACCCAAATCTCTGCTTGCTGATTCACTGTTTATTTTGCATTTGTCTCATGTTCCATGTTGTTTTGCATTCC
 CGGAACTAGCACAGGCAGGGAGGCTCAACACCTAATTTTATTTCCTAGGTGAAGTGGAACCTGAAGATTTTCTTTTA
 TAGACACCATTACTAGATCTGAAAAGAAAGAGGTAAGTTAATTGACACCCAAATGGAGGATGAAAATAGTAGAGTCAGGA
 AGAGAGAACTTAATTTTAGCCATCTGTTTTTCCAACCTTGGCTTTTCTCAGTCTATAGATTTCCAAAAACAAAGTCTAACA
 TTGGGTACGAAATAGCAAACTTGAGCACTGAAAAACAAACAAATGAGAAAGCAATCTAACAATTCACGAACAAAAAAC
 TAGCACTTTTGTATGTCTCTGAAGTAAGAAGAGATGAGTAACCTTTTGTATTCACTCAAATACTTTCTTTTAATCCAAC
 TTTTAAGTATTTTTTCTAAGTGTGAAAATTTGAGAAGCCAAGAAACATAGAAATGAGACAGAATACCCATAATACTG
 TACCTAAATATACTACTAATATTTTGCTAACTTTTTCTAGTCTTTTCTCTGTGCATAACTTTTTATAGGATAATATTAC
 ACATACAACTTTAATCCTGCCTTTTTCACTTAATATTATAACACAAGCTTTTTCTCATATAATTGAAATATCTTGCAAA
 ATATATGATTTTAATTACATAGTACATCATGAAGGTTCTCATATTTTATTTAGCAATTCCTTTACTATTTGACATCTAA
 ATTGTTTCCAGATTTTCATTATTTTAAGTAGCACTGCTGGAATGTTTCTGCATACAAAGCACTTTCCATATTTCAAGTT
 ACTTCTGAATTATGATATAAAAGTGATATAATACCATTAAAGCTTTTGGTACTTATTATCAAATTCCTATCCAAAGACT
 TATGTCATTTGGAAGTTGATCAGCAATATATGAAATGCATATCTAATTTATATATACACCATTTTCAAGTATTTTATTT
 TTAAAGTAAATAATTTTTTAAGCAAGACAAATCTTGAGATTTTAATTTTCAATTTTATTAATAGTGAGATTGAATATAC
 CCCATATTTTGATATAATTTTATTTCCAATTTTGCAAAATTTCTACTTATTAATTAACATTCATTTTTGTAGATTTA
 TACCTCTAATTTTAACATATTTTGTAATGGTACAATGTATGTTACATATTAATACTATGGCAAAGGCAAAAGAATGA
 TAATGAATGCTTTCAAACCTAAATATATATATATTTTTTTGAGATGGAGTCTCACTCTGCCACCAGGCGAGGAGTGCAA
 TGGTGCAATCTGAGTCACTGCAACCTCTGCCTCTGAGTTCAAGCGATTCTCTCTGCCTCAGCCTCTTGAGTAGTGGG
 TTACAGGTGCCTGCCACCATGCCCACTAATTTTTGTATTTTTTTTTTAATGGAGACAGAGTTTACCATGTTGGCCAGG
 CTGGTCTCACACTCCTGACCTCAGGTGATCCACCTGCCTTGGTCTCCCAAAGTGCTGGGATGACAGGCACGAGCCACTG
 TGCCTGGTAGAAGTTATATTTTTTAATCATACAACCTTGCACTATGGAAGAGACTTTACAATGTACCTTATTCAACCCTG
 TATTATTAGTTTGTTTTCTACTGCTATAAAGAACTGCTCAAGACTGGGCAATTTATAAAGGTAAGAGGTTTAATTGGC
 TTACAGTTCTGCATGGCTGGGGAGGTCTCAGGAACTTACAATCATGTTGAAAGGCGAAGGGGAAGCAAGACACCTTCT
 TCACAAGGAGGCAGGAAGGAGAATGAACACAGGAGGAACTACCAAATACCTTATAAAACCATCAGATCTCATGAGAACTC
 ACCCACTATCATGAGATCAGCATGGGGAAAACAGCCTCCATGATTCCATTACCTCCATTTGGTTTCTCCCTTGTACGCT
 GGGGATTATGGGGATTATAAATCAAGACGAGATTTTGGGTAGGGACACAGCCAAACCATATCAATGCCCCAGTTGAAGA
 AGCAAAGATTAAACCCATAAAACAATTTATGAAAAAAATGTTAGCTAGTAGATGAGTTTGTGGTACAACATACTTTT
 TGTTATTGGACCTCAGAGTCAGTAGAAAATCTATGTGACTTGGCGCAGTAGGGGAAGTTGTTATTAGAAAGAAGGGCTTT
 TGTTGGACTTTGAATAGGAAGAGTTCTGTAAAAATGAAGAGAACAAAAATTAAGGGCATGAATCTAAGGCCAAGAGGTA
 GAAATGGATGTGTCTCAGGTGCGGCAGAGATGAGACCAGCCTGGAGGGTAGAGGGCTGGTGTGGGAGATACAGTGTGA
 GGTAAAGGCCAAATTAAGCATGCAAATCACAGATCACTTGACTCTTCTAGTTGAAACACATCACTCTGGAGTTCTACTG
 AGCATAAGCTACAACCTGATTATATAAAGCCATCCTTGTGGTTACAGGTAGATTGCACTGACTTTGGCAAGTTTCAAGA
 TGTAAACTGTGCTGGGAAGACTACAAGATGGGTTGACAGATAAAACCTAGTTTGTAGGAAAATGCATGCACAGGGCAATA
 TTATCAGCTAGCCACAGCAATGGCCATGGAATACAGGGTCTCTCATTTATTTGTGTTGTCTCCAGGCAGTTCTATGACCTT
 AGGCAGACTACTTATGTTCCCTATACCTTCAATTACCCTATTTGTACTCTACGTTCTTTCTAAATCTCAGATTCTATAGC
 CTCTAGCAGGAGCTCAGATAAAGCATAGCTTCAGATAAACAGCACTCTAGAGAAAAGAGAGAAAATGTAAATAGCAGGA
 AATCTCTATTGTCATCTTTAGATCTGGAATAAGAAGTCCCTTTCTTTTAATTCACAATTTTAGAAGGTATGAGGAGATAT
 CCAGAACTTTCTTCCCTTGTCTGCTACCAATGTAGCAGAGGGCCAACGTAAGCAGATGTTACATTATCTATCTTAC
 GTGTGTAGAGGGCAAATTAGTGACATTTAAGAGCCCAAGGCAATAATTCACCATTTCCCATGAAAAATCTGTTATTCC
 ATCCTTGTATGTTTCTTTTCTTTTAACTTTTTGAGTATTTAATCTTGTGTGCTCCTCCTAAATTCCTTCTGTCAGA
 TACTTTGGTGAGTAAACCTTGATAAATTAAGCCTGTTTTTATTATATTCCTTTGGAGTTGTCTTTGATTGTGATCAAGC
 TTCTCTTTTATACATGCCACATGTATTCAATCTTCATTTAGATGAGAATCTAATCAAGGGAATAAAGCTGCCAAGTTTG
 GTTTCAATTTATGCAACCTTAGAAAAATATATCTTTTGTAGTGTGGAGACAACAGTAAGTTAGAGACAGAGCTAATCCA
 TTACACCTTGATCACTCAGAGGCAACTGTACCCAAACAATTCCTTCCCTTTGTCATCAAGAAAGTTTGTGTTTATCTGA
 GAGCTTAGTACTGTGCTGGCACAATATAAGGTGCTCAATAAACTTTTAAACCAATGCATCTGAGTGGCTTTATAATT
 CAGCAGTTACTGTATGAACTGACTTACTATGTAGAAGAAAAAGTATTAGTTCAAAAAGAGGAGATTAAAGAATCTTC
 TTACATATATAAAACATGTCCTGTTTCACTAGCTTCTCTAATATTTTGTGGATGATTGGAATCCCTTTTCACTCATATTT

99/375

AAGGATGTCATTATGTATGGGGACATTTGCTGTTTTCAATACATAGATTTATATTTGCAGGGAACCTAAAGTCCCCGGAA
ATTTTTCTGAGATATTATCTGATTAATCCCCATAACAACGCTGTGAGGTGGGTTGTGGAGATATGAGGGGAAAAAGGG
AAGGGATTTTCTAATACCATACAGTTTGTGTATATGACGTAGCAATGAAAGTAGAAGCTTATTTTCATCTGATGACCAAGT
TCAAGACATTTTCTGCTATATAAATCTTTAATCTCTAGGATAGAACTGTCTTAATTCCCTTTGCATTGACACAGCAAA
ATGTATATAGGTGGTCCATCTAATTCCATCTCTGAATATTCCAGCACTATCTGTCTTATCCACCTCCTCTATTCAATTTT
TATTTCTAAAGTGTCTCCCTGCAGGAGCTGACTCTTCTCTTCTTAATTAACTTTATGTGGAACTCCTATCGTAAC
GAAATTGCACGTGTGAGTGTCTCTCGCCTGGCTTTCTTTTAGTGACCTGGAGGGAGAAAGCTTTTCTGCAGTCTCA
CCACATTATCTTTGCTGAGAGAGAACTTGCAGGAACCTAAGATACTGCCTTCTGAGAGTCAACCTTTTCATCAAACA
TTCTTTAGTTTAGGCACAGCTTTGATTTTTGCAGAGGTTACCACTGTTCATAATTTAAATGCACTGGTTCATGCTATT
GGCAGCAAAGCACTATGGAAGAGTAGACAAAAACGTGGATTTTGGAGCAGACAAATCAGGTGTGAATACTGGTTCGTGCC
ATTCCTGGGCAATTTACTTCATTTCGTTGCTGCTGATTTCTCGTTTGTGCCATGGGAAACATATTAACAATGCTCTACC
TCACAGGAGTATTGGAAAGTTTAATGATACATTATAGAGATTTTTTTAAGGATAAATGAGGTAGCAGAACATGCAATCC
TCTTCATAGACTGCAGAGCACATCTACCAATTTCCCTCCATCTCCACTCTCTCCCTGACCTTGGGGGGCTTTGA
ACCTTGAAGGCTGACCAGTCAGATGTACTTCTCTCTCTTTGCCCTCTGCTTGCTTGCTTGGTTAGTGGGGAGTC
CTAGGAGGAGACAGATGGAGAAAGGAAATGAGACTGCGTGCAACTGGTGTCTTCTTCTTTTAGGGTCTAGCTGTGT
CCCAGAGAGCAACTTCCCTTTTCAAGGCAGCCACTCTGTGTGATGCTTTTTCTTAGGTATGGGCAACCCATCCCTCCT
AGGGTGAAACTTCTGCTGTGCTAGTTCCAGGTACTGTGCCATCCTTTGTGGATTCCTCTACCTTACCAACATCTCCTT
AAAGAGTCTCTTTGTTGAACCTGCTGTAAATGATCCTAATAAAGTATGCTGTCTGTTTATCTTGGACCTTCAACTGG
TAGATTATTCATACTGGTTAGTGGAAGTAGATCTGCCTACATATGTATTTTGGAGAGGTTAGCACTTATAGAAGA
AAAAACAAGAATGGGCTGTTTTTACTTGGCATTGTACTAAGAGAAAAAGGAGTAGTGATGATGATGATGATAAAG
ATATGATGATGGTGAGACCCAAATACCTCTGATGAGCCAAACATTCTCCTAGACAATACTTTTACCTCATTCAATTTG
AAAACACATATGTGTATTATTATCTTTCTTTTGTAGATCTGGAAGAAAGTTCAGATAAATCAAATAATGTACCTAAAGC
TACATAGAATGCCAGTGGAGAGCTGAAATTCACCTATACCTATTTGGTTCCAAAGTCTATACCTTTTACTGACGCT
AGGTGCCTCCTAGCTATACAGGGTGAGAAGAGCCATTCCATCAGCAGTCAAGTTTCAACTGAATCTCTCTGCCTATTGA
AATTTCTCTAAGTTCTAAATTCCCATAGGAAAGTATCTCTTAATGATGCTCTTAAATGATTTCAAGGCAAAATTTTTTA
AAAACCTGGTTAATTCAGCAAAGCTTATCAGGTCAAATCCATTATTTGTCTGATTGACTGATTGTTTACCATTTAGTC
ACTAGCCAGTAGGGCAACTATTCCATGGTTGTCCCTAAGGCTACTCATTAAATCCTGGATGAATAATTAAATATTTTG
AATAAGTTTTTCTCTGATAATATATGTTTCTACGGCTGTTATCTAAAGTTTTTTCTCCCTAGATATGGAATATTTTCAT
TCAGTTTGTATTAATTTCTGTCCAAATTCCTAAATTACATGAGTAACATAATTCTGCATTTCTGGGACCTATAGGATGC
TAATTTGTAAAGGTGATTCAATTCCTGGAGGTGTACTAGCTGAGAACTTTCCATTGTGGATCAGTCCCTCCCTTCAAAT
CCTACTCCTTTAGAAAAATCCATACACACTCAGAGAAACAGTATTTATCTTAGCAACTCACATTGATTGCTGATTTT
TCTTTAATCTTCAGGCAAGCATTTCTATCAACCTTGAAGAAGGCTTTGTCCCTTGTTCCTTTGAGTCCCAAGTTG
CATCCAGAGATATTTCTAGCCACAGTGAACCTTACTTCTCTGTTTCTACCTCTACTTTGCTGTTACGGGACCTTTTACC
TCCCGCAAAGTGTCTTCTTTTATTTTGAAGACTTGAGAGGGTGACTCACATATATCCAAACAAGTATTTTCAGCC
TTTTAAAAGGCTGTGTTCTTGCAGGCTTCTCTGCTTTTCAATTTTGTATGTTTTTTTAAAAAATGATACATAGTTACTTT
GTTTTTTATCTTTTAAATGTATAATTCATACTACTTTGTACTTTAATATTGTCAATCATTTTAGCAAAACCAGCTCCTT
CAGACCTTAATCACTGTTACTCTTTTCTTAAGTCTCAGACACATGTTTTTGAAGAAGCTTACAACAAACCCAAATGAT
AGAATACATGCTGCTGTTAGCATCAGCCTACACCTACCTATTAGCCTAAACCTGCAATATCAGAGTTTTTGTGGTTT
GACCAAGCCTTTTATCCTCTTTCCCTTACAGTAAGTTCTTTCCAGAAAGAAATATCAGCCACATGCAAAATATATCT
TATAAATATGTAGGTTGTGCTGATGTAGCAGAATATCATAAATGAACACAGCACATATAGCTATTGATTTGTTCTT
TCTTCAAACTCAAAATGGAGAATCTCCACTGTAGTGTCTAGGAGAAAGCAAGATTAGTTAGGTAATGAGGATGTCAA
TGTCAATTCAAGTGGCAATTAATCTGGAATATTCTTGAATAACAGTTACTGCTTACTTAACAGTTATTGCTTATACTT
TTTGTCTCATCTTCTCAAGTATTCTTACAACCCTAAGAACTAAAGGGGTAGATAACTCACTAAATTTACTGAAGAG
TCATTGGATTGGCTTCAAGGTACTATTGATTATTGTGTCAGTGAACAAAGACGCAATGATGCAGTTGCTCAGAGGGCTCTT
TTCTTCAATGTAAGTAAGATTCTCCAGCAGTGGATCACCTTAGTGATCCCTTAGTGAAAAATGTGCAATCCTTAGC
TGTCCCAACAAGAATCAACATATACACAATTCAGTTTGCATCTTCAATTTTATACATGTAACCTTAGGTTATGGCTATCA
TATCTGTTTTTTTTTTTTCAGCCACTAAACTGTAGAGTTGAATATTTAATGGAAAAACAGATGGTGCTTGAAATCTC
TAACTTACATTTTAAACAAAGCTGTTTTGGAATGTGCTTATGTATACTTTTTTATTGCTTTAAACACAGCACCCTTTT
AGCCTGTTCCGATGAATTTAAGAATTAAGTGTCCAGTCTAAGACAGCATTTCAAAGTGCAAGTGTAAATCATTAAC
TTGATTAAACATTTCTCTTTTCTTTTTCAGCATTCCAGTTGGCTTTTGTAGTGATACGTGCAGTGAGATCATTGACA
CTGGAACACTAGTTCCCATTTTAAATTAATTAATAACACACATGTACATATAACATTTTAGTTTTGGTTTTGGATTTTA
AAAGTGTAAAGTAACTTTTGTGTTTTTCAATCACTGTAAGAAAGAAATACCTGTGATTGCTTTCTCGGAGCA
ATGCTATGCTATCATGATTAGGCTTGTGGGAAACGTTTAGTCAACTTTTCACTGCTGACTGTACACAGCTTATTAACA
AACAAAGACTAGTTTGTCTGTGTGACCTGTTAGCATTTTGTAGGAAATCTTTTCACTAGTTTATATCTTACCATTCAAT
CATATACGCTTACAAGCCTGATGTTGAACACTCTAATTTTGTAGTGCATGCAGAAAAATATATGATTAAAGTCAAAATA
TAGGGAATTTATGCTTGAATATGAAACCTTCTGGGCAAGTCTAAAGCATAAATTATACTTATGTTATTAGTTACTTC
AACCAGTCAATCTGAAAGTTCTTCCCTTCTATGAGCTTTCTACCTGGCATATATCTCTAATTTCTTCTTTTAAATCT
TTTTTTAAAAACATTTTAAATTTGAACATCCTCAGGGCTCTACTGAAGGTTAAACCTTATTTCCAATTTATGTAGTGTCT
TAAGGTACCACAGTCATGATACTTTTTTAAATTTATATTAGTGTATGGAAGAAAGCAATAGAGCAACTCAAAGAAAGCC
ACACAAGGAAAGGATGAAAGCAGACTATTAATTTCCATCAAGCAAGCGCTAAGAACACATCCCTTTGTTCAATTTACCCA

100/375

AGGGGGATAAGGCATCCAAACAGATGTACTTGTGACGTAGGAACATTAATTTGAAGGCATCAGAAAAACCACAAATGCA
AACACATTTCTCTAGTATGGAACACTTTGTGTTATAACCAAGTGATTCTATTGTGGTGGCCCAAGGCCATCTTTCATTC
TTTCTATGGAGTTACCATCCAGCTTTTAAGGGTGAGGCATGAGTATGTGCAGATAAAGTATAGTATGCCCAACTGTGTT
TGTTAAAAAATGAGGATATGCTGAGAGATATGCCAATCCTTTGACTGAATACCGTGTTTAATAACCAACCAAGTAAATT
CAACAAACTCTGAGGAATTGTTCAAATTTATGTGTTTTACTGGTTGGTGTGTTGGTTGTATGGATTATTGCATAAAAGAA
GGGGCCATGGATTTGAGCCTGGAATTCCTTTTATCATCATACAAAGTCACTCACTGTAATAGGAGGTGACCTGCATACA
AACTACCAAACCTGCAACACATCTTCTCTTACTGAGTTTTCTTATTATAAATTAAATATGAAAGCAAACCTATTTCATAT
AATGTTTTCTGTTATTGAATTTTCAAGACATGAGATCTGAAAAAAATGTGTAAAGGCAAAAGGGAGGATATTTTGAA
TAATTACAAATGTCATTAAACATTTCCCTATTCTTGGAGGAAAAACATTTGTAAAGCAAAAGGGAGGATATTTTGAA
TTAAGGAACTGAGACTACTTAATGATGCTAGGAGACTTCTATTGTTGTTTAAATGCAAAAAATTTTATCTTGGTG
GAAAGGCTCAAGCTTTCAGATTAAAGAGAACCCTGAGTTGCCTACATTTGTCAAATGTAAACAGTAGAACTCTCATTTT
ACTGCTTCTAGCTTCTTGAGAATCCACTGGCATAAAGAAAAATGCTTCCACTTAATTAATGACTCTAAGCAGAAGTTA
ATGTTTATCAGAAAAAAGAGCCAGACTTATTGCCTAGTTAGAAGTTGTCACTTTAGGGCTATAAAATTTTATTTTGCT
CTGGTCTGAGCATATAACCCCTCAACGCTTACGTTTTTGGCATAATATAATCCAAAATTTGTATACCTTAGAGGTAGATTT
TTCCTGGTTTTGATGAAGAAAGTTTAAAGAAATTAGTTCTCTTTAGAATCTGAGGATGTTTATCTTTGGCATTCTGACAT
TTGGAAATCCAAAGAAAATGTTTCAAAATTTAAACAGTCTCTGTTCCCTCCCTACATGCCTCTCTTGTAGGCTCTTGACATC
TTTCATTGTGAAAATTTAAGGCATACAAAAGAGGTAGAAAAAGATCATCCTTAAACGATCACCTTACTTAGTGAGTTT
CTCTCATGAGAGGGGTTCCAGTGTGCTTGGGAAGACCATTTAGTCACTCTTCAACTCAAACAATTCAGGCATAAGATGG
GTGGTTAAACTATGTGAGTGTCTGTTTCTACCAGTTATGAATTTCTATGATTCTATACCATGTTGTGCTCATTCGTA
AGTTGAATCAAAGACAGTTCCCAAATAAATAAAAAATCAAGGCATCAGGGCAAAACAGAGTATATTAATCAGCTTGGGC
TACAATATACCATAGACTAGGTGGCTTAAACAGAAAAGTATTTTATCACAATTTCTGCAGGCTGGGAAGTTCAAGATCAA
AATGCCAACCAATTTTGTTCCTGGTAAGCTCTCTCGTCTGGTTTGCTGATGGCTTGGCGAAAGCTACTTTTTCCCTGG
GTCCTCACATGGCAGAGAGAGAAAGCAAGATCTCTGCTGCTGCTTCTTTTAAAGTCACTAATCCCATCATTAGGGCCCC
ACCTTCATGAATTCATCTAACACTAATTACCTCCCAAGACCCACCTCCAAAACCATCACATTGGGGGTTAGGGCTT
CAACAAATGTATTTTCAAGGGGACACAAACATTTGGTCCATAAGAGAGTTTGATATTCTTTTTTTTTTTTTTTCTGAGA
CGGAGTCTTGCTCTGTTGCTTAGGCTGGAGCGCAGTGGCGCATCTCGGCTCACTGCAAGCTCCGCTCCCTGGTTCAC
GCCATTCTCCTGCCTCAGCTCCCGAGTAGCAGGGACTACAGTGCCTCCGACCACGCTCGGCTAATTTTTTTTGGCATT
TTTAGTAGAGACAGGGTTTACCATGTTAGCCAGGATGGTCTCAATCTCCGACCTCGTGATCCGCCCGCTCGGCTTC
CCAAAGTGCTGGGATTACAGGCATGAGCCACGGCGCTGGAGTGCAATGCCGGGATCTCAGCTCACTGCAACCTCTGCCT
CCCAAGTTCAAGCCATTCTCCTGTCTCAGCCTCCTGAGTAGCTGGGATTAGAGGCATGCGCCATCACACCTGGCTAATT
TTGTCTTATTAGTAGAGACAGGGTTTACCATGTTGGTCAAGGCTGGTCTCAGGTGAATTTGATATTCTTAAGGGATGAT
TGATTTAATAAGTCACTGTCTGTTTAAAGCCAAAGGGTAGTGACTAGTATAATGGAATCTGTATGTTTCCCAATTTG
GTAACACTGAAAATGATCTGGTCAACATCTTTCTCTTCAATTTCTTATTTTCTAAATTTTATGTTAGGGACATTTTACC
AATGATTTTTGAAGTCTAATAATCACTTCATAGACCTAGAAGCTAATTTTAAATTTTACTGAAAATGATTTTCCCTTTC
TTCATATTCTTAGTTTGCTTATTTTATATTGTTCTTTCTTAAACATCTAATCCAATGACAGGTCTCTGAAGTATCTTGT
CCTATCAATGGATTTACTATTTAACTTTTCAAGATGTTTATATATTTTCAAGACTGACTATCTCAGTTACCTTCTTCCCT
CTGCTAATGCTGCTTTCTTACTGGCTTTTAGCTAATCAGGGGAGGGAAGGAAAGGTACAGACAAGAGAACAGGATATA
AAAATTTTTGTTGATATATATATTTTAAATCAGGAGTTAAAGTAAATTTTATGATTTTCTTTTCTTTATAATATC
CCTGTTATTCTCCAACTCATGAAGTTTATAAATCTTCTCATCTGGAGAATAAACTAGATAAAATTTTAAATCTTATTC
ATTAATAAATTTTCTTGTGATTAAATTTCTAACTTTCTTGTAGTCTTTTGCAATTAATTTTCAATTTTCTAGTACACT
GAATCATTTTCTTCTACCAGTTTGAAGATATTCAAGATGTCTACTTAATTTGATTTGTTAATTTTCTTGATGAAA
TTGCCCTTTATTTGACTTAGGATTCTTATGGATGTTCTACTTTTGGATAAATTTGTCACTCACCAGATGTCTTTGATGT
TCCTTGTCTTTTTTGTATAGAATTGTTGTTTCAAGTGTCTCAAACTGGAAGCAACTCCTTGGTGTGTTGGAAGACATA
GGGTATCTGGCACATTTCTTTCATAATGAATTTAAAGCCCACCTAAATAGGCTGTGAGTTTGTAGTCTGGGGGCTAGGAG
CCCATCTGGTGAAATTTTTTCCAGTAGGCTCCCTAGAATATTGCTTATTTTTCATGGAAGACTTTAAAAAATTTGTACAAA
CTTGGTAAACTAAAGTGATTTTATTCTTAAAGAAAATATATATTTTTTCCATCTGTACCTTTACATTTGCTGAGTTTTTA
GAAGCAGTCACTCACCTAATGACCCAGGGTGAGTTATTTATGCCATTTTATCTGCATTTTATAGTGTCTTCTCTGGAGTG
GGCAGCCAAAAAATAAATTTAGAAAAGATGGTACATTTTGTATGGCACTTCAGAGCTATCTGCATTCTTCTCTGGAGTG
CAATTACCCTGTAAGATAGAGTATTTTTTATTTGTATGGTTAAAGTAAAAATAACAAATTCCTTCTAGATGGGCTCA
ATTCTCTACTATATTTCAACCCACCTAAGCTACGAGATTGACAAAGCTGTTGCAGCTTAGAATCCTAATAAAGTTAAG
ATGTATAAACTGATTTTTTCTACTGGTATTCACTCAGCAGGGTCCAAGAAGGTACGGGAGATGCTGTAGGTAAAATCC
TTGAAAAGCACAAAATACAAAACAAAACCAAGTTCTCTGCTTGTGCTTTTATTCACAACAAATTGATATGAGAAGTTGT
AGTTTATAGAGATTTCACTCCTTTGGTCTTTATACCTGCCTTCCAGCTTGTCTCTCTCTTCTTACAAAGTTCTACAAATAT
TTACTGAATGGCTACTGTGTGTTAGGCTCTGAGTATCCAATGTAAGATACATGTTCTCTCTACCCTCATAGAGCATATC
TGATAACTAAATTTATAATTTTACAATTTGTTAAATTTATTTACCACCCTGTCTCCCTAACCTGATCACCTAACTG
TATCCCATTTTAAATCTTTTAAATCTTTTATAGGAAGGCTGAAGTTCTGTATCTCTCTGAAGTCTCTCTGTATTTGCACTTC
ATCACGTTGTGGGCACCTGTTTATAGGAGATTTTGTAGCTGTGAATAATGTGCTATAATTGACAATTATGCTCATTG
TTGCAGAAACATAGATTATTTTCAAGATAGATAAAAAGAAATTTTCTCAGATAATCAACAATAGTATAAGAATAGCCAAG
AGTATAAATAAATGTGAGAATGACAGGAAAGGCTCGAAAGAACAGGCACTGATCAGCAACCATTTGCTTTAAATCAATC
ACATGTCATGACTGTTTTAGTGGCCAAAGCCAATCAATTAATTTGTATCTTGGAAAAAGTTCCACTTTTTTCTGTAC

101/375

TGTGATGTGTTTGCTATTTTCATTTTGGACAATTTCAAGTTGAAGTTGAATTACAAATGATTACGTCCAAGAAATAATT
GCATATATTGTACTTACCAGTGTAACACCACAGATACAAAAAATGGAGAGAAATCTTGTTGCATTGTTAATGAATAT
TAAAAAATTATTCTTACAGACAAAATCTCTCTATAACAAGATGAAATTTTGAAGAAAAGCATAACTGGTGGAGTTTCT
ATCAGTAGTATTTGCTCTAGAAAAATGTTTATAATGGCTGCTTATTTTAACTGAAGGTAATTTTCTTTTAAATTTTG
TTTAGCTTTTTTTTCACTATTGAAATGGCAAATGTTTTGAAAACTAAAAAATTGACTTCAATTAAAATTATTAGTGTGTT
TACATTGTTTCCCATGGTCAGCACTTTCAAGGGCAGAACTGGAATTTGTCCTGAGTTATAGTTCTGGCTTTGCATCTGT
GCATCTATGTCTTGGTAGAAGAAGTGGGAGTAAGAGAACCATAAGTAATTAGTTTTATTATCAAATGCTTCCAATAGCT
TGCATAATTTTTTTCAAGGGTAAAATGAGAAAAACAGCATTGAAATCACATTAAAAAATAAGCAAACAAAAAATCCAA
ACCAAATCATCAAGCAGAAATCATTTTAAAAATGCTATACAATAATCAATTGTGTTCATACTTCTGCGCCAAAACCTT
TAAGTCTTAAAGCTTTCTTAAATGGAATTAGTCCATCAATAAGCAGATAACAACCTTACTTTTATTGTTGAAAAATGTC
ACTCTTGTCAGTTTACAAGTTTCCCTAATCTGTGCAAATTAAGCCATGACAGCAAGGCCAAGAATGGTTCTGTTGGTA
TATAGTTAGAGACCCCTGACCCCTGCTTTCTTGTCTTCTATTACCCAGGATATGTCATACGCCACACATGGGGGT
AGGGATACCGCCCTACTTATAGCATAAGAAGTGAATAAGACATTTAGCTTATAACTCTTTTATGGTAATATCCCTT
CCCCTGCCATTCTTCTACTCAGGTAGTCTGGACTTCTGTTTTGGCAATATTGCTTCCGTGAGAAGGATTGACTGTA
CTTGACGCCCTCAACATCCTGAATTTAATACAATCTACGATATTTGTTAAGCCCTCACCAACTATTGACCAAACTATG
ACAGTTACATCCACGGAAGTGTATACCAAATGGTACCCAGCAGTTTCAAGAGTTAAACACACCACCACTTCTCCA
GGTTGGGCTTTAAGATTTTCAAGAGGATCTTGTCTATGAAATCATATTGGCTTTTATAGATAAATGTATTAATACTGAA
AACAAATGATAACACCACAGTACCACAACCTAAACAATCTTTCTATAAATTAATTTAAACAAGAAACAACAAGCTTT
AAATGTATCATCTCTGCTTATTGTATGTCCTTAAATAATATTATTAATGTCCAACCTTTTATTTTCTAGAAGAGGTCA
TTATATAGCATTGATTTGCCAGCAGGGTCTTATTGTAACATACCAAGAGACCTAGACATTGCTCAGAAACAGTAGTCTC
AAAATAAACAAGGGATTGGAGGAAAAGATGAGAGATCTCCAGTATGTCTGCATATAAGGGCTGAAAAAGTAAAGTTTC
CAATTGTTTTTTTTCTTTGCAAGTGCTCATGCAGGGATTGCAACATGCATTCTCACCCACATAAATGAAATAATT
GGCAAGTAGTCAAAGAAGACCATATCCTTGAGTGGGTAGTATTGTGTCTATTGGAAGCATTTACATGTTTTGATTT
CCTGAAACAATGCTGAAAATGTCCTAATGCAGGAAGGGAGAATTGAAAAACAACCACCATAAATGCAATTAGATGTTGG
TAAAGTGACTCAGAATAGACGTAAGTTAAAACTTTCTGACAGGGTTTTCTAGCACTGGGACAGTATTTTTGAGGAAA
TTATAAATGGTCTTATTTCAAGATCTTTTAAACAATCTGATGAAATATTATTGTTCTTTAAATTTGTATTGTTAGTAT
CATCTCTGAATTATAAAACATTTAAACATTTTAGTTTATAATCTTTAACTTCTCACTATTATTTATAAATGTGTAT
ATAATTGTGCATATGTAGACATTTCATGAGGAAGATGAACATATATGTTAATTGGCATCTGCTCATTTAAACTAAAGT
TGTATACCTTTCATTACAGTAATACACGTCATTCATTAAATTATCTTGTGGCTTAGCTTTACAAATCTTACCGTTACAT
GACTTTGGGTGATGACCTCACCGGTGTCTATATCACTCATGTGTAACATGAGAGGAGTAGATTAAATAAACAAGAAAGA
TTTCTTTCAACTCCAAAGCTATGACAATGTATTTTCAAGATTGTGTACTTCTTAGAACAGGCTCAATAAATTTTCA
CATTATGAACCTTGCAGTCAAAGAATAGGTTCTTCTTAACCTAACAAATGACTATCCTTTCCACCCAAAGTAAACAG
GATCCTGATTAATAAATTGAGTTCAAAGAATCTCTGCCAAGTATGCAAAATCACTGCCCTGTGTTGTGCGACATTATT
GCTCTAAGAATTGATGGAATTGAAAATAACCTCATTTTACTGGGACCTCAGAGAAATTAATTATTTAAATTTTTGCTG
CTTTAAACATTAATTTTCTTAATTTACCCATATATGTTGCTGATAAGAGCTGTAATATTTGAATGGTTGTGCTTTGAA
GAAATCTGAATCCTTTTGCTTTGTATTCCAATGACAGCAGCTTTGACCAGCGACAGCTCTCTTCTGAAAACCTACCATT
TTGACCCCTGCATTTACCTGTGTGCCACCAAGCCTGTGTTTTTCATTAAACAGAGACCTCTGAATTGTTGTGCCA
AATGTGGACAGTGTGTTTTCTTCTCACTTTCTTGAATTATAACAGGTTCCAGGCGGTAACATGCAACCGAACTTTACT
GAGTCTGGACATAATGGGAAAAAATCATAGTGTAGAAAGAAAACTATAGGACTGAATATAAAAAAATAATCATTCTG
GCATTACAGGACAAACCCAGTCTTTCTGCTTAGTTACTGACCTACCCCTGTGCTTTGCTTATCTTCCACAGTGAA
ATGCTTTTCTTCTTATATCCTACATGGTTTCCAGGCCCTTACTCCAGGAAGCCAGGAGAAACGCCTTATTCCAAGTT
CAAGTAAACATAATAATTTACAAAGATACAACCTCTGCCACAACAAAAACTCTTTTACAGCGTTATGCAAAGGCATT
TAGACTGGAACATCTATGTTCCAGACACAGACCTTAACAGTCTTTTGTCAAACATAAAGAGCAATCTTCTCAAAGC
TGGAATAACACCTTTTCTTTTAAATAACATTTCTGTGTCTCACACTCCAGATGTTTTTCAATTTAAGACTTTAGAAAATA
CTGGGATCAGTTATCAGCCAAGAGTACCCCATTTCTAATAAATAATTTAAAGACATGGAAAAATCAATGAATCCAAAC
AATCATCATCCTCACCAACCTTATCATTTCTATAACTCACAGTAAATAATCTCAAGTTCTTTTATTTTGGTTAAATTAA
GAAATTCAGAGTAAACTCTCTAGCTTCTGATTTAAGCTCAGAGATGCAGAGAGCTTCAAGTGTCTCTCTCATTTA
CCATAAGGAAAAATCTATACAACTACCTATTCAATTTTAAAAAAGACACCAGCAAATTTAGGTCTGAGGGCAACC
AAACAACCTCAAATCTGGAAGAGACAGGCACCTGCAAGAAGAAAGAGGATGGCATCATTTGTTTTCTTGGGTAGAC
ACCACAGATGTATGTAACACAGCAAGATGATTAGCTAAACATTTTAAATGAATTGCTAAGGCTGAGTATGGGCTAGC
ATGAAAATGTGACACACTGGAGGTGGCAGATATAGGAGTGCATCTATAGCAGGCTTTTCTTCCACAAAACCCACCAG
GCACTCACAGGAAAGACTGGGGAGAACAGCAGCCACCTTCAAACCCACAACCATTTCCAGTGGAAACAAAAGAGTTAAT
TGGCAAAGAGAATAGCAAAAATCATTTGTCTTAGGGAAGTGGAGGAAACCCATTGGTGATGGTGGCAGTAGGAAGAATGA
TCGTGGTGAGGGGAAGAGAAAAAAGTAATGCTCTATCCCCAGGGTGGGATGGAATATATGCTAGGATTTGCACAAC
AATTGGAGAAAGTTGCAGGAGCACTTGTGAAGGCCACATTGCTGATACAGAGGTACACATTACCTACCTAAGACTGAGT
CTTAATCAGAACATCAAGGAATGCCCTTCTCCTGGCTGTACCAACAGCCTAACAAAGTGTGAGTAAAAATAATAT
GAGGAATATGGTTGAATATGGAAGAAATCAAGAGACACATTTCTTTTAGGGCCAGCATTAAAGGAAGACCCAAAGCTA
AAGGGGAGCAAATATTAAGAAAATAACAACCTGGCAAGCCATTTCAATCTATTCTTCTTTAAGAATCCAAAAGTATC
TATCTCAGTATCTACTGTCTACACAAGATATCCGGCTTTTCAAGAAAATATTATGACCATATGAAAAGGCAAGAGAAAG
CACTCCGAAGAGATAATACACATAAACATGTGATATATGGGACACATATAAAAAATTATCACACAAGGAATTTAAAGTAA

102/375

CTATGATTAATATTTTAAAGGTTCTAAAGGAAAAGGTTGACCACATGTGAGATCAGATAGGTAATTTTCAGAGGAGATAT
GGAAACTAAGAAAAATCAAATGGAAATGCTAGAAATTAACAAACATAGTCAAAGAGATTAAAAATGTCTTTGGGCTTGT
TAGTAGACGTGAGACAGCTAAGGAAATAATCACTGGACTTGAAAATAAGTCAGTAGAAATTACCCAAACAGAAAAAGA
GTGGAATAAAAGGGAGAAAGAAAGAACATAACAGAGCATCCAAGAACTCTGGTACAATATTAAGTGGCATGACATATC
CATAATTGAAATGACAGAAGGAGAGGAAAGAGAAAAAGAGGCAGAAGAAATGTTTGAAGAAAAAATCGCTGAAAAAAT
TTCCAAAATTGATGATGGACACCAAATCACAGACTCAAAATCTCCAAGTATATCAAGCAAGATATATACCAAATAAAC
ACACAGTGCAGAGTCATGTTATATTGAAATTGCTAAAAATCAACACATAGAGAAAAACCTTAAAGGCCAACAGAGGGA
GGGAATGATAAATTACCTAAAGAGAAGTAAGGATAAGAATTACAGCAAATTTCTCCTCAGAAATGTTGTGAGCAAGAAG
AAAAAGGAATGACATCTTTAAAGTATTGAAAGAAAAACAAAACCCAGTAACCCAGAATTCTATGCCCAATAATAACA
GTTAAACAGGAATTTAAATTTTTCTGACTGAACTTTTTAGGTTCTTATTCTGTCTGATGTCCCCAAAGTAATATGCAC
CTATATCCTCATTTTTATTTTGTCTTTCTTTTCAAATCTGAGAGGGTAAAGCTGTTTCTTCTATTCAAGACCAACACC
TCTATTGCCTCAGAGGGTTAGTCAATTGCCTCCTCCTCTATAGGCTCAATTGCAATTTAGCTAATCTCTCTTCTATTT
CTCCTTTTTACCTTAGTTTATGAACTAGACCATCCAGTCTTTCTGTCACTCCCGTCCATGTATATCTCTTTTGACAAT
TCTAGTATTTATATTTTCTTTCTAGTAGTTATTGCTATTTCTTCTGAGACTGCATGTTCTTAAACAATGCTGTTCC
CCAAGATTCAGTCATTGGCCCATGTAATATTTTAAAGGTATGAAGACACCTGAAAGATCATAAGATATCTCCTTTCATGT
CTTAACTATCTTCTATTTGATTATCTCTCAATTTCCATATTTAGTTCCCATTTCTACTTTTAGTCACAGAACTCTAACC
AAGTGCTTGCTGGACATTCATAACATCTACACAACATTTCCCAAAGTATGATGCATCCATTATTCTTCTCATCTTTAAA
CATACTGCTACATATCCTAAATATTTTCTATTATATTTACTGCCTCAGCTATCCAGTTGCCTAAGGCAGAGCCCTGGGA
ACCTTCTCAGCTCCAGACTCATCATCCC'TCCCAACATCTAAACAAGCAACAAGTGTTACTGCATGTATTTGTGGGCAC
ATATTTCTGAGTCTCATCTCAGCTTGACTTCCC'TTCCACCAATGCCCTGGGGATCACCTTATTTTTTCTCCCCAAGA
TGGTTCTCATTAAAAATATACCACAGTAGTGATAAGTAGTAAATTATATATGGAAGCTGCTGACTGTTGCTCCATTAGC
TGTTTCTGTGGCAACTCTATTTTTTCTTATTAATAGTGTACTAAGTGTTTGAATCTATGTCTTTTCACAACTTCTTTT
GATTACAGTTTAAAGATAGCCTTTAAATACTAAATTCATATTAAGGTGGATCTGATTGTGTGTGTGTGTGTGTGAATTT
CTGTTACAGCCATCATTCATAATTCATTATTTGTGAGGAATAATTATAGCAAAGACTGATTAGATGAAATGTTAGATTA
TTTATTATACAGATTGCAATGGAATTAAAGTCTAATATATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT
GAATTGCAAAATGCTTTTAAAGTTTCCATATACTATTACCAACATTTTCTGTTTTTCTGTTTTTCTTTTAAACAACTACAGGTA
GGAAAGGCAGTTATATTTATCCTCATTTTATGAGCCTTAGACAGATTAGGTGAGTTAGCCAAGATGCACAACATAGTAAT
GGTGAATCCTAGATATACTTCAGTTCTTCTGATTCCAAATTCCTTACTTTGGACACTAAACCTTGGAGCCACACAAATG
TAACTGTAGGCATCACTTATGTACTAATGTACCTGTTACACCATGTGCCTACTGGAGAGAACTGTAACATATTTATAG
TCAATTATCTATATTTATAGCTATCCTCACAGTTGGATAACAATGTTATATTGTAACTCTAGATACTTTTGCACCTCTA
TGACAGAAAGTGGAATTTTTGTTTAGGAAGACATTTTAAATTATGAATGGAGGCTTGTGGGGATCCCTATTAGCCTTTG
TTAAATCACAAGGAAGGTAAACTCTTTTGCATAATAAAGTATTAGGATTTTTTAAACTTGTCCCCTGACTGCTCAAGAGA
TGAAGTTTGGGGAGCGGCAGTACTTTGGAGGACTCTGGTAAGTGAATAGATATAAGAAAGTTCTGCAGGGATAGAGCCA
CATGGCAGCAGACAGGGCTTAGGAAGAGGGACTACCAATTGTCCCTGTAGCAAAGATGGCCTGGTTAAAGCCTCTTTAG
AATGAATGAGTTCTAGTAACCAAGTTTAAAGATTTGTCTGTTTCTTTTCTCCCCCTCAACCTTTCTTTAAACTTTCTGT
AATCACAACAGCATTGTAACAATTTTGCCCTCAAGCTGGGAAGAGAAGGGCTGTGTTCC'TCCTAGAGACAAAACAGGGAA
GAAAGGTAGCAGGGGCAGAGTGAAAGCAATGATTGCTGTGGAATTGGAACAACCTGTGCAGAGGAAGCTGTGACAAATAA
TTAGGGTTGGTGAAGCACCTGTCCCTTTGGAGGTATTTCCAGAAATACTGGGAAGGGCTCTAAATGTCCCATTGTTAT
GTGGGGAGATGGTTTTGTTTATTGTATTGCCACAGAAGTCTGAATACGTTCAAATATTTTGCATATTTGTGTGTGTGT
GTGTGTGTGTGTGTGTGTGTGTGTGTATTGAAGTACTTGGCATAAGGTTATGCTATTTCAAATTAACCTTATAAAGTAATTT
GTTGTGATCAATATCTGTGATCAAAATTTATTGAGGACCTCACCAATGCCAACATGTGTGTGTGTGTGTGTGTGTGTGT
TATTATATATATAATATAATATATATATATATCTACTCATTTAGTTCTCAAACATATTCTATGACACTAATATTTTATGTA
ACTTTTCTATGATACGATTATTATTCCTATTTTTTGGATAAAACAACTAAAGTACACAAAGGACCAAACTTTACGTCT
AAAATACCTAAACATACATATTTGAAAATAAGAGAATATGAGGAAAAAGTCTCAAATTTTATGTAGGTTTTTAATAATA
AAATTGAAAAGTGAATCATTTTAAAAACCTTAAAGTTAGTATATGGAAATATTTGGCTCAAGAGTGAACTTTAGACCTC
TTGTCTGGATATGAGTATGGAATACATTATTCAGTTTCTTTTTTATAACTTTAAATAGCTTGTAAGAAGACACCTATGC
AAATAGCAATTTCTCCAAGATAAGTGCCATACAGGCCCTATGACCTTTTGAACATGTCTTCCCAATACTTCATTTCT
GATTAGAGGATGGTCATTGAGATTTCACTGGATTTAAATCCACAGTGGGATAGGTTTTAATCCTTTCTGGAAAAAATAT
TTATAAAGCCTATGTGAGTTTCAAGATAGTAAGAGCTTTTATTCTGTCTCTCCTTGGATGTGTTAACCCTTCTCTAC
CTCAGATCCATGCATTTCTCTAAGTTTATACTTTTAAATTGAGCTTTCATTGTTTCTATGACCAATTTTCAATTT
GTCTCTACTTTGCACTTCAGTAGAACTAAGATGAATTCGAAACCGCACACAGCCTTCATCAATGGTCCCTTTCTGTA
AAGAGTATCTCTCCCCGTACATATTCAGAACAGTATAATTTTAGGAATCAACTGTATCTACCTAGAAATATGTTTTATT
TCTCTCTGTCTCCAAAAACAATTGAAATTCCTCATATGGTTTATTGCTTGCATTTACAAAGGAGCCACAAAGTTTGA
TTTGTGTATACTATTTTTGCTTAACTAGCTATCTGGCTGATGTGCACATCAACAAATGACAATGTAGTCATTCCATCTT
TGGTACATGGAGTATTATTTGATAAAAAATCCACTATATTTTAACTTCTGAAAGTAAGGTGATTTTGAAGTATCTAGAA
GATAGTTTCTTTATTTCAACAATCATAACCCTGTGCTGCCAGATACATATTTGATCCCAAACCTTGAAAAATATTTCAAT
GGTTAGATTATTAATGCTTTTCACTGACAGATTTTATGTTTACCATTTTCACTTAAAGCTTTCCAGCTTTTCTCCTC
TTTAAAGTAAACTATTTGGAAGTTTCACTATTTCCATATCACTAGAAATTAAGAGTCAGAGATATATGTATTCT
CAGAATTGTCTGAAGAGTTTATTGTAATTTAATAAGATGTTCTCTTCTGTTTCTATTTATGTCTATTACATATCA
TCTATGTCTATTATCGTGTCTTCTTCTCATGATTTTTCTGGATCACTTTAATGCTCTAATCAAGTGCTCTTTATTTTGTGT

103/375

ACAGAGGCCTCATTATGATAATACTATATAAAACATTTGTATGATGCTTTTCAGTTTACAAAGTCTCTTAAAAAACAT
TACCTTATTTGCAACTCATAACAACCTTGTACATTAGGCTGTGTTATTATTATTATTATCTGTAGACAAGAAAAACCTT
TTATCAGGTAATGGAGAGGCATTTAAATGGAAGATTTTCAAATCCTTACCTGAGATCTGTTCACTCTTTTCTTCTTTT
TTAGTTTGTTCCTCTTTTACTCTGTATCCTTGGAAATTATGTAGATCTATAGTGAAAGGCTAGCCTATCAGTTGCTAGCCA
TTACTTTACCAAGCTGAGCCTTATTTGACTCATCCCAAGTAATATAGGTGATAATGACTACATCATAGGATTGTTATGA
AAACTAAGTGAGACAAAGCACGTTAAAGTGTCTAACACAGTACCATTTTATCCATCCATATGCCATATGGTGGCATAAT
ATTCTAGGTTGGCTATTCTTAATGCTATGTAAATTTTCTTTCTTCTGAAATTAAAATAATTATAATACTTAATCCAAA
TTAGACTCTAAAAAGGTCATGGTCAGTATAATTTATGAGGTAAAAATGGCATCAAAAAAGAAAGAAAAATGCAGAGTAC
AGAGTAAAACTGAGCCATTTTCTGGGAAGTGTGTGAAATTGAGTTTCTTAGGCTTTTCATGTCGATAATGCAAACTA
AATATAATTTGCAGGTCCACAAAAGTAAATGATATAAAATTATGCTAAAAATCAAGAAGAATGGAAATTAATGGATT
AAAAATTTATTGTTATTGCATTCTCTCAATTTTTTAAGACTCTGTCTCTGCAGTAATAAAGGGAACAGAGGGAAAAAGTG
GGATTCCAAAATAGTTTATTTAGACTTGGAAATGCTTGCATGCTTATATCTCACTCAACATGAATACGCTCTTAACATATG
GGGACTTAATGAAAACCTTTATATTATTATTAATTGATTGTGGATTAAATAAATGAATTAAAAATGGGGTTAGAAATAGTG
CGTTATTTCTTCATCTCTTGCCTTTATTCAGCTTTTCTCTTTGTCCATTCTACAGTAGGAATGAATTCTATCTCATAGA
TAGATTTAGAAACCAACTCCAGCAAAAAATTTGTTGTGCTCTTTGTGAGGGAAGAGGTTAGATTAGGATGAATTAATA
TTTCAGTTGAAAAAATCTGAGCAAAATTCATTTAAGATATTTTGAAAACCTCTAAACAGTATATAAAATATATGAAAAGTT
TAAACAATAATAAACAGTGGAGGTACATCTTTGTGTGTGTAATAAATGTAGTTGATCTTTTCTTTAATGTTTCTCTTAT
TTTTGTGTTTTGTCTTAGTGAGGCTTTTCTACTGCAAGATTATGGATAAATTTGCCCATGTTTTTGAACATTCCTATGGT
TTTTCTCTTTTTCCCCTAACCTTGACAAAACAACTTCTTTTCAAATGTCCTAGATGCTTCAGGGATAGCTATTTGAAATA
GTTCTTGGAGATTAAATAATTCTCCATGGCAAGCTGTCTTATCCGTATTCTGGTAGGTTATCTTATAGAAGAGGAAAAGA
AGGCAAAATCCTAGAGTTAAAAAATACAATAAAACAAATGAAAAAGTAGTAATAACAAGTACAACAACAGAGCTCTA
GTGGTATACCTGAGAAACAACTGCATTCTTTTGTCTTTTTTCTTATTTTCAATCATTATGTTGCATGAGGTACAGCCAT
ATGAATAAATATGTACTAACACATACCTAGACATACACAATCAGCCCTCATATTCATGATTTCTGCATCTGTGTTTCA
GTCAATTGCAAACTTAAATACTTTTTTAATCATCTGTAGTAAGCATGTAGAGACTTTCCTTGTCAATTATTTCTTAAAA
AAATACAGTGTAATCTTACATAGTATTTACATTGTATTAGATAATGTAAGTAATCTTGAGGTGGTTTAAAGTACACA
AGAGGATGTGCGTAGGTTACATGCAAACTATGCCATTTTGTATCAGGGACATGAGCATCCGTGGTATTCACTGGAAG
TTGTGAAACCAATCTCCACGGATACCAAGGGACAACCTATATACATATATGTGGCTATGCGGCCCTACCTACTCAGAAGA
GGGTTACAGAGAAGAGGGGACGATGGAGAGATTCAATGTCTTGTGAGGGAGAGGGGAGCCTACAGTGGAAATGGTTA
GTTAGAAAATAGCCAATAACTTATTTCCAGTGAGGAATTAGAAAACAGGGATTATGGAATTGGAAAAACTGAGGCATTA
AAAGTCTTCTCCTGAAATTACTATGCCAAGTGGAAAATCTGCTCTGAACCCCTATCCAGGAAAACATTCCTTCTCAA
AGATGTTACTTTTTAACTTTGATAAGTCTTGATTAGCTCTTTTGGGTTTTAGCTGTTCTTTCACTATGTCCACACTTTAC
TTATCAATATTAATAAATCTTGTATAGCCAGAGTGGTTTGCAACCTAAAGTAGAAAATATCTATATCTCAGGGCTTTTG
TACCTGATTGCACAGGTAGCAATCCCAGGCTAAGAGTACCCCTTAATGCTGCAATGGCCACAGTAGTCTTGGACAGGGG
GATCATGCCAGTAGGTCTGCCAGAATCTCTGGATAGATTTATTGTTGAAGACCATTCCTAGACAAATCCATTCGTAA
AGACTGGAATAAGTATTACTTCTTTAGATGTGCAGATATTGATACATGTCTCAAACATCAGATATAATCAGGGAAC
ATGATGACACCAAATGGACAGAATAAAGCACCAGTGATTGACCTTAAAGAGATGGAGATGCATGAACCTTCTTGACAGAG
AATTCAAAATAACTGTTTGAGAAAAGCTCAGTGAATGTTGAGAAAAAGACAGATAAAACAATTTCTTTTAAAAAAGGAGAAC
ATTAAGTGACCCACAATGAGAAAACAGAAAAATTGAAATAACAATTTTTTAAATTAACAGAAATCCTAGAGCTAAATA
TACAATGAACAAAATGAAAATGAAATAGCATCAACAGCAGACTTGATCAAGCAGAAAAAGAACTGTAACTTAAACAC
AGGGTTATTTGAAAATACACAGTTCAAGCCGAGGCGGGCGGATCAGGAGTCAGGAGATCGAGACCATCCTGGCTAACA
CGGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGAGGTGGCGGGCGCCTGTAGTCCCAGCTACTCGG
GAGGCTGAGGCAGGAGAATGGCGTGAACCCAGGGGGCGGAGCCTGCAGTGAGCCGAGATTGCTCCACTGCCTCCAGC
CTGGGCGACAGCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAGAAAATACACAGTTCAAGGAGAGGAAAGAAATGA
AAGGAAGGAAGAAAGCATATGAGATTTATGTGACAGCATCAAAAAACAAATGTTTGAGTCATTGGTGTCAAGAAGAAGA
AAAAACAAAGGAGTAGAAAGTTTGTGTTGAAGAAATAAAATCAGAAAACTTCCAAATCTGGAGAAAGAAATAAGTATT
CAGGTCAAGGAAGGTCAAAGATTTCCAAATCAGATTCAAGTAAAAATAAGACTATTCAATACATATTACGATAAAATTTCTCA
AAAATCAAAGACAAAGAGAGGGTCTGAAAGCAACAGAGAAAAATAAGCATACAACACATAAGGGCAATTTTAATATGTC
TATCAGCAAACTTCTCAGCAGAAACCTTACAGATCAGGAGGGACTTTGAGAAATAAATACTTTCCAGAAAATCAAAGCTGAAGA
AATGCCAGCCAAGAATGCTATACACAGAAAAGCCATCTTTAGAAATAAATACTTTCCAGAAAATCAAAGCTGAAGA
AGTTTATCATTGCCAGACCTGTGTTAAAAAAATGCTTTAATGGAGTTCTTCAAGCTGGAATAAAGAAATGCTAATAATA
CAAAAACATGTGTTAATGCTAGTAACACAAAACATCTATAAATATAAACTCATTTGGTAAAAGTACATAGTCAAATTTA
GAATACTCTAATATTTGTAATGGTGGTGTTTAAATCACTTATATCTTTAGAAGAAAGGTTAAAGACTAAATTAGTAAAA
ATAATAACTACAATAATTTGTTACAGGACATGCAGTATAATAAGATGTAAATTTGTGACACCAAAATTCAAAATGTGTTT
GGGAGAATGAGGTAAAAGTTTAGAGTTTTTTAATTTTTTATTTTGAATCCATGTTAAGTTGTTATCAGCTTAAATAAC
CTGTTAAAAAGTAAAAGTGTCTTTTATAAGCCTCATGATAACTACAATGGAATAAATACTTGTAAAATTTATGGAACCT
CGTCTCTACTAAGAATACAAAAAATTAGACAGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCAGAAGGCTGAGGC
AGGAGAATGGCGTGAACCCAGAAGGTGGAGCTTGCAGGGAGCTGAGATCGTGCCACTGCACTCCAGCCTGGGCGACAGA
GCAAGACTCAGTCTCAAATAAATAAATAAATAAATTTTATAAAGTGTTTTTTATAAGCCTCATGGTAACTACAAAGGAA
GACCTTATTATTGGTACACACAACACAAAATGCAAGGAATCAGAATACACTACTAGAGAAAATCACTTAACCACAAAGA
AGGGCAGTAAGAGAGAAATAAACAAGACTCTACAAAACACTAGAAAACAGTGAACAAAATAGCAGTAGTAAGTTCTT

104/375

ACCATAAATAAGCCCTGAATGTAAATGGATTAAATTTCTGCAATCAAAAGACAGAAAAATAGATTTAAAAAAGACCC
AATCATATTCTGCCCTCAAGGGACCCACTTCACCTGTAAAGTACACACATAGATCAAAGGTTAAATGTTATTATATTATA
TATAATTATCTATAATATAAAAAACATATTTATATATAATAATGTTATACAGATATAAAATTGAACACACAAATAAATAG
AAAGATATTTTCATGTTTCATGGATTCAAATAATCAATACTGTTAAAAATTTCCATAATACCCCAAATGATCTACAGTTTCA
GTGCAATCCCTACCAAAATATTAATGACATCCTGTCATAGAAGTAAAGAAATTTTAAAAATTAATATTAGAATTATAAAAA
ACCTGAATAGCCAAAGTATTATTGAGCAGAAAAGCACAAAGCTGGAGGCATCACACTACCTGACTTCAAAATACTCTACA
AAGCTAAATTAGCCTAAGCAGCGTGATATCAGCATAAAAACAAACAAACAGATAGACCAATGGAACAGAATACAGAGCC
TGGAAATAAATTACACATTTGTAGCCAACTGAGTTTGTCAAAAGTGCCAAGAACACACAATGGTGAAAGGGCAGTCC
ATGTTTATTGTCAGCACTATTTTTATGATAGCCAAGATATGGAATCACCTCAATCATCCATGCAACAACATGGATGAACC
TGGGAAACCTCATGTTAGGTTAAATAAGCCAGGCACAAAAAGAGAAACACTGTATGACCACACTCATATAGAATCTAAA
ATCATTGATCTCATAGAAATAAAGAAGTAAATGGTAGAGAGGCTAGACAGGTTGGGGGAGGGGGCTTGGACAAATGGTC
AAAGGATACAAAATTTTAGATAGGAGGAATAAATTCAGAGATTTATTTCTGAGCATGGTGACTACAGTTAATGGCAAT
ATATTGTATTATTGAGAAATGCTAGGAAAGCGGGTATTAAATGCTCTCCACAAAGCGATAACTATGTAAGTTGATGCA
TATGTTAATTAGCTAGATTTAACTATTCCACAATGTAGAACTACTTCAAAACATCATTTTGTATTGTATAAATGCAATACT
TAATTGACAGAATGTCAATTAAGAAAAACAAAACAAACCAGCTCATGTCTCTCTGCAATGATTTAGGAATCCAGAATAA
TTAATAGAGCCAAAATTTCCATCACATTTTCTTGACTGCCAGTTCCATGTTGGCTATATCATTCTGTGAGCAAGTTTT
CATTTTTTAACATTTAGTATGTTTACTCAGTAATCAACATATTTGCTTATAAGTAGTGACACAGATATTCAGCCGCATA
TATTTTTCTAACTGGTATCCTCTTGTCTGTCACCATTTATTTGAAAAATCCATCTTTTTTTCTAGAAGTATGAGTTT
TTGATTGCTTAAATAGAATGGAAGGAGAAAAGGAAAAATAATTAACTTTCAGATTTCACTAGGTTTTGGGTTTTTGCAAC
ATAAGGAGTATTCACCTTAGACTTCTGGAATAATTTCTATTTTTTAATCCAGGTTTATTTGTTGACCAGTGCCTTTGAATA
GTTTTCCCGTTAGTTGTAAATAAAGGATTTCTTACTCTGTGTCTTGGTTTTCTCTTTTACCTGATATTTAGAATTAT
TATTGATAATTTAGTAATAATTTTATCATTAAATATCCCAATCTATTGCTTGATTTGTCATCATATTGAGAGTTTGAGAA
GAATTTATTTTTATTAAATTTATTTTCTTAAAAACAAAGTGTTATAAAAGAGAGGGTTAATAGAACAAAATGAAGAATA
AATAGCTATTAAGAGGCTAAGTGGTATTAAAGACAGCTCTGTGGCATTTTGAGGTTAACATATTTAAATGATACATTCA
TTCCTAGACAGATAGATCAGCATTTACCAGATGGTTTCTGCTAGAAATGCTCTCCTCTCCAATATCATCATCTCATTGT
GGTGTGTACAGATTTCCAGAAAGTCAATGGGGATGTCTGGGGCTAGTGGGCCAGGCTTCTTCTTTTCATTTGTATTCA
AAGCCAATATTTTCTTCCAAATCTTGCCCTTTCTTGTTTAACTCAAGGCTTGGCGTGGTAGGGGAGGTTGGGAATGG
TGAGAAATAGTGCTCCTTGAATGAAAGGTTGGAGGAAATAAGTTTACAGACTTGGCAGTGCTAGTTAAGGGCACACCC
CATAAAGAAGTCTCAATATGGTTAACTAGTTTCCAGAGCAGTGCTACAACTGAGCCTTGTGCATCCCTGAAGTGATGAG
CACAAGTATGATAATCATCGGAAGAGAACATATTTGTAATAATTTGGAATCAGCCAGTTATTTGTGAGTACCTTTTGC
TGCTGTAGGATCAGACACATGTGCTCTGCATTTGGGTAAATGTAAACCACATTTCTTATTATAAAGAGGAAAGA
CTGCTGGAACAGCTGCTCTGGAACCAAGTTGCTCAGAGGAAGTGAGCTAAACTTGTGTTTGAAGTAAATGGTGTGTAG
CTAAACCTACCCAGTGAAAAAATATGTAGAAATGGACTCAATAACTTTCTCAAGAGATGAAAAATATAGAGTAATAAAT
AGGCAAGAAAATAGGGATAGAAATGGAAGGAGGAGAGAAATAACAATGGGAAAGGGAAAGAGGAAACACGCTTATG
TGTTGTAGTGACTGACCAACGCAGTTTATGAAACAACATAGCTAGCTCAGGAGTTAGCCAGGCTTCAATTAAAAAGA
GATGCATAAGCCCATATACCTCTTTTTCTTCCCTCAAAATGACCTTGAGTTTATGTTTGGTAGGGTTTTGGTACAGCT
GTTATTTGATAATATCACATTGTGCTTTTCAATTAACCTTAGATTGTTTAAAAACAGATAACTGAAAACCATCTGTTTG
TGGTTCTGTGTAATTTGTTCTCAGGACAGGGACTAGGAATGAACCATTTTAAATCTGCTAATGAAACCTCTCATTAAAT
TTAAGGAGTTCTACAACTAAGTCTGTGGTACCAGGTAGAAGGGGTGCCAAGTGTGGGCTTCTGGGATAAGGGAAAA
TTAATTTCTTCTTGGCATTGTGTTGGGTAGCATCTTTTTTTTTCTTCTGGCAGCGAGTCTCATAATTTAATAT
GCATTAACATAATCAGGAATGATTGCTTAAAAATACATGTTCTTGAAGTTTATCCCAAGAGATTTTGTATTGATCTC
TGGGAAGGGCTCCAGGAATTGCCACAGTTAAACAAGCTCCCCAGGTCATTCTGATGTAGATGGTCTGAAGGCCACACTG
ACTAATGCTGCCTTTTGAATTTGGGAGGTAAGTTTGGATTTTGTAGATCAAAATATTACTACCAAGAATAAAGAAATAC
ACAAAACCTCCAAACAACTCAAATGATGTAACAACAAAGCAAATGGCTCAAAGCAAACAAACCCAAACAAAGGTTTTA
AATAGGTCCTTAGAGATACAATGTAATTTGTCTCAGCTGCGGAGACTTAAAGAGGCCAACTCTTAGTTGACATGGAAGA
ATAGGGACAACATTGCCAAGAAACATGGTTAATTTAGTTATGGAATACCAACCCCTGGGCTCTGGAAGCATTAAACAAT
TTTACCCTATGCTAATCTTCCATATATGGGGCATGCTGGATAAATCTATTTTGTCTAACGCTCTCTTTTACAATAATGT
ACTTAATTTTGTGGGTATATATTCTAATTTGTGTTTTCTAATTTCAAGTTCTAACTTTTAAAGAGGCCCCACCCAC
TGTTTTCCCTCGAGCTTATTAAAGGGCATAATATCACTTTCTTGTAAAGAGTAAAGATTGGAAGAATTTAGTTATC
AGAAAATGGTGGTAGGTTGATGCTTTTGGTGGTGGACGCAGCAGTCTGATGAATAAGCATCTTTCTTGAAGACCAGGGT
TCTGCCACTAAAGATGTATGTGATTTCTAGAAAAATAATTTTACCTCATTCATCTCAGTTTTCTCTTTGTAAAATAG
GGATAGTGGTAAGTGAATGATTTCTGTGATCCTCTCTAATGCTAAATAGAATGAGAATGTGCGAAGCCTTTGTTATCTC
AGTAACTTTTACCACAATTCATCTGTAACGACAAAATGTTATTATTAGAAACATATTAAGAGCTTGCAGTGGCATGA
ATTCAGGCACTGTAAATGAGTGTAGTGCAGTACTGTGAAGGTGAGGGGAAAAATGTCATGTTTCAATCATAGGGCTACA
AGTTTGCACAGATCTGAAAAATTACTGTTGGGTTTCTTCAACTAGGGGATCCAGAATATCACTGTTATTCTATACCTCT
GCCATTAGGTGGGGCAGTTGAAGAGTAGGAAGACCGTTTCAAGTGAAATGTTGTTTGTCTTGAGTATGTTGTTTCATA
CTCAACAACATCTGAAAGTAAAGTGGTAAAAATAGACTTCTTTTATATAGTCTAAACTCTCAGTGGCCAGATTATTAGTT
TCTTTATTAAATCTGGATGGTGAGGAAGAGGGGGACATGGGTGATAAAGTTAATGTAATGTAATATTGCAGATTGTAT
TATTAATGTAAATTTCCATTTGGAACCTAAAAGCCAAAATGGATCTGAAGTCAACTTATGCAGTCTACTTTTTTCAGAAG
AACAAATTAAATAGTATGAGGTAGAGACAACAAAATACCAGGTTTATGGAACTAGAAAGTGGAAGGAGCCATGAGAG

105/375

TTATTGCGGCCCTTCTCTCAGTGTCTATTGATTTCCCTTAGCATCTGGGGTACTTAACATATTTCTCTCTCTCTACTT
TCTTTTAGAAAATTCTATGTCAATTAATTTATCTGACATCTTAATCGATAATTCATTAAGAAAATCTTTTGTGCCAGC
ACATCATGATGAATTTTGATGGCTAATGTTACCTGGTCTCTGTTTTGAAGTGTTTTTATTGACTTATAAATTTAAGATG
TTTTCTTAGAATTAAGAAAATGACATGGAAAACTTCAAATCAGTCTTTTATAAGGTAGTGACTTTAAATTTTCATTTG
TCAATTTCCACATTTAGGACAAAAAGTAAGAGATGTGGAGAGGAAGACAGGAATACTAGGGAAAAGGTGAGAGAAGAAG
TATTTCTGGTTACTTCTGTTGTATATTCTTAAAAGTAAGAGTCCATAGAACCATGATAGTCAAAGTACTGAGGAAACAG
CAGATTTGGAAATTTACATTTCATATCAAAGGGATTTTCTGTGAGACAAACCAATGAGATTTGATAGATTAGAAAGGAA
GGACTAATAAGAAAGCAACTGAATAAATACTTGAATAATAAATGATATGTGTTTTTCACACTCTGGTCCAGTTATTTT
TTTTCTCTTTTAAAAAAATTTTGTAGTGTGTGTGTGAGTAGTTAAAAGTTCCCTGCAATCCACAGAGCTCTATA
TTTGATTAATTCTGGATTCCAGCAAGTTTGCATGGCTTTTCAGAGGACTACAAAATAGGGAAAAGACTAAATTCATA
TAGAATTGACCCATGAAAATCACGGGAGTTAGTGGTACCAACCCCTGTGCAGCTGAAAATCTGTGTGTAATGTTTGACT
TCTCCCAAAAGTTAACTACTAATAGCCTACTGTTCCACAAAGTCAATTAACACATAATTTTATGTTTTTGTATTATAT
ACCGTATTCTTACAATAAAGTAAGCTAGAGAAAAGAAAATGTTATTAAGAAAATCATAAGAAAAGTAAAAATAGATATTT
ACCATTCTTAAGTGGAATGGATCATATAAAGGCCTTCATCCTCTTCATCTTCATGTTGAGTAGGGCTGAGGAGGAGA
AAGAAGAGGTGAGGTGATCTTGCTGTCTCAGGGGTGGCAGAGGCAGAAGAAAATCTGCATGTAAGTTGGCCTGTGCAG
TTCAAGCCCATGTTGTTTAAAGGATCAACTGTAAATCTTTTAACTTTTCAAATGACGCTCATTACACAAAAGAAATTTGG
AAGTAGACAGGATTTATATGCAGCTATAATTTTAAATGGCAGCCAACATCATGAACAAATTTCTCTGACATCTCATTTCC
TTGATTTCTAAGAAGTCAATGCAAGAGGAAGGTGAGAATCAAATTTGGGCAGCTTTGCTCAGCTGAATATTATATGGTG
ATGATTATGTTAATAATTAATAATATTGAAATATTTATTTAGTACAGTCATTACCATGTAAACATTTTGGTCAGTGATGG
ATGGCCTACCATGGTAGTTTCATAAGATTATAATAGAGCTGAAAAATTCCTATTGTGCTGAGCTCTACTGATATCACAGCCA
TCATAAAGTTGTAGCATAACATATTACTCATATGTTTATGGTGATGCAGGTGCAACAACTCACTGCATGGCCGGTGA
TATAAAGGATAGTACATACAGTTATGTACAGTACATAACTTTGATGACAAGAATTACTGATAATAAGTGTTACTGTT
AAGTACTTAATATAATAGATTACGTCCCTGATTTATGTATTTACTATACTATACTTTTTAATCATTTGTTTTAGTGTTGA
CTCTTACTTACAAAAAAGTTAAACATAAAACAACCTTCAGGAATGAGTTTCTTGAGGAGGTGTTCCAGAAGAAGGC
ATTGCTATCATAGAAGATGACAGCTCCATGTGTTTATTTAGCCCTAGGCTAATGTATGGGTTTCTGTCTTAGTTTTTAACAAAA
AAGTAAAAAGTTAATTTTAAAAAGCTAGAAAAAAGCTTACAGAATAAGGATATAAGAAAGAAATATTCTTCTACAGT
TGTAATAATATGTTGGTGTTTTTAAAGCTGAGCATTATTACAAAAAGTCAAAAAGCTTAAAGAAATTAACAGTTTATAAAAA
TAAACATGTTACAATAAATAAGGTTATTATTGAAGAAAGAAAATGTAAAAATAAATTTAGCACAGCTTGGCCTGGCG
CGGTGGCTCACGCCGTGAATCCAGCACTTTGGGAGGCGGAGGCGGGCGGATCACGAGGTGAGGAGATCCAGACCATTC
TGGCTAGCACGGTGAAACCCCGTCTCTACTAAAAATATATATTTAAAAAATTAGCCAGGAGTGGTGGCGGGGGCTGT
GGTCCCAGCTGCTCTGAAGGCTGAGGCAGGAGAATGGCGTGAACCCAGGAGGCGGAGCTTGACGTGAGCCGAGATTGCG
CCACTGCACCTCCAGCCTGGGCGACAGGGCGAGACTTTGTCTCAAAAAATAAATAAAAAATAAATAAATTTAGCATAGC
TTAAGAGTACAGTGTTTATAAAGTCTACATTAGTAGACAGCAATGTCCAGGCATACTCACCCTCACTCATTGACTCA
CCCAGAGCAACTTCCAATCTTTGTAGCCTCCATTACGGTAGGTGTTTTCTACAGGTATATTTTTATCTTTTACCACATT
TTTACTGTATCTTTCCCTATTTTTTATATGTTTATAGTACACAAATACTTACCATTGTGTTATGCTTGCCTGCAGTATTCA
GTACAGTAACATGGCATAACAGGTTTATAGCCTAGGAGAAACAGGCATACAAATATAGTCTAGGTGTGTGTGTGTAGGC
TATACCATCTAGGTTTGTGTAGGTATCTCTGTGATGTTGACACAACAACGTAATCACTTATGATGGATATCTTAGAAC
ATATTTAATTATTAAGTGACACATGACTGTACTTAATATGTATTAGGTACCAAGCTAAGCATGCAATTAATCACTGCA
ATCCTCAACAATACCTTATGAATTTAGTACTATCAATTAGCACCATTTTTTTCCATGGGAAATAGGATATAGGATATTC
TATCACAAGCATCCCTCAATGCTAGAGGAAAGAAAGAAAGAGACGAAGAGGGTGAGAAAGAGAGGGAAGGAAGGAAGG
AAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGG
TGTTTGTATTTAAATAATATACATTTATTTATTTTGGGAAAAGCTTAACGTAGTTGGGAGCAGTGATGTAGGTTTCGTAC
CACCATTAGTTGAAATCATTGCACATCTGAGAAGAAAGACCATAAATCTAGGAAGTTTAAAGAGTTAGTTTTCGTTA
GATCCAAATACTGTTAATGTTGGCTATCTTTTTTGGATCACAATTTAAGAGAACAGATTCCCTTAAATGAATTTGTTGA
GGAAATGAACAGAATATTTACAAATATTTCTCCTTAAAGTATATTTTCAATAGGGAGAGGTCTTCTTAAATGCCTGTCTG
AAATAGCACCCCTCCTCATTCTCTAAATCTTACCTGCTTTATTTTCTCTTTGTAGAACTTACCACCTGACACATTTTAC
AGTAGTTTGTGTGTAGACTGTCTTCCCTCTCTAGCTTCATAGGTACAGGGAATTTCTCTGCTCTGTTCACTGATAATTT
TCTTGTACCTAGAACACTGCATGGTACTTAGTAGATGTTCAATAAATATTTGAATGAATGAATGTATAAGTAAAAATAAG
AAAATTCATGTGGCCAATAGGTAATTTAAATATTTCTGCTTTGCTAAAAACCAACAGAAAGTAAAAATAGGTAAAAGCAA
TTAGTATTTTCACTACCAACAATGATTTAAACATATTTCAAAAAGATATATACCAATGCTCATGAAGGTGAAGCAAAA
CAAACATTCTTACAAAATTGAAAAACACTTTGCTGGAAAGTACTTTGTGAATATGGTGTCTTTAAAAATGTTTCTATAC
TATATTTTAAATCTATTAATATATTCAGGAAAGCAATCCATAATTAATAAATATCTTTTGTCTGCACAAAAGTCTTTGCT
TCAACAGTATTTATTGTAGTGAAAGAAGTTCAAAAAATTTCTAAGTTCCAAAAGGTAGGGGACAGTTAAATGAATTTATGA
CAACTCTCTTTTATGGTATATTATATAAGCATCATGAGTTAGGTTTACTAAGAGCTTTTTTAAATATGAAAAAATGCTA
ATGAAATAAATTTAATTTGAAAAACAGCATAAACATTTGGAATAAATGACATCTTAAAGCATACATAGAAAAAATGGTA
GAAATTTGTGCCAAAATATTAAACAGAAATAGGGCAGGTAAAGATATGGGTGATTTTGTTTTATCTTCTCTATCTTTT
ATTTTTCAAGTGTTCCAGAATGAAACTTTTATAATGAAAAAAGTTTAAATATTTTAACTGATTTTGTATTATCTAG
TGATAATCCAGAAGTGATTATGTTTTATACAATAGACTTAGGCTTTATATGAAGAAATGAATATAGTCTAGTATTGTTT
TTATTATCTAGGAATATACATGTAAGTGAAGAATTTATGAGTAAAGTTTAAATATAAGCAAGTAACTGGGACTTCTGGAG

106/375

GAAAGCTCACTCTAGGGGAAGCTCTCAAATGTGTTTTCAATCTTGGATTCCAGTCAAAAAAGACATGAGTTACTTGGATTTAATAACCAGATATACATTCTCCTCCTTTAGGACTAGTGAAAAATGGGCACTGAGTGAGCTTGGGCACAGACTAATAAAGGATATTCAAACACGATAAAACAAACAGTAGCGAGGCCGAGCTACCTGGGCTTAGAAGGCAGCAGGGCCCCCAGAAA GTGGTAGTAGCAACAATTACTGTGGTTTTATCCTGTGGCTAGCCAGGTTCCAGACAGAAAGTTCTTCTGGCCTCTTACCCTAGTAACTCTGAGGACTGTACCCCTTGATTCTTGGATTGTTAGACACATTTCCACTTCTGGCTTTGGCCCTGCAACC CTGGTACCTAAATTTGAGCAGCTTGAGCACACAAGTTCTCATTCTTTTATTATGTATGTCTTTTAAAGAGACTGTGAA ACATCCAGAATACTAGGGCAGCAAGCCAAAGCACAGCCTCTAATAACAAGGCTTTCCATTATTTGATTTCATTTAATGA AAAGCTATGTGAACATTGTAAATAGGTTCAAGAACACACCTTAATTCTTGGACTGTTTTTTAGACCTTTAGAAGTCGAA GGCCTCTGAAATTATATGAGCTTGGGTGTTGAGATAGAGGAAACATGAAAATTTATTCTACCTGAACCTCTGCAGTTAT AACTAGCATCGTATAATTTATTTATTTATTAAGTCAAGGTTTATAAGTCATTTCCACAAAGCCTAGCACACAGTGTCT AGCATATATAGTAGATGCTTGATAAATATCTGTCAAGTGAATTTCAAATACTTAAATTTTGTGTAAATACATTCATGT AATGGAGCCATATCATCTCATATGAATGATTGAAGAATACAAAACTCCAGACTTGAATGCAGAATATATAAAGAACTA GTACAAATCAATAAGAATGAGACACACATCCCATTAGGAAAATGAGCAAAAGACTTAAACAAGAAGCCCTTCACCAAAG AAGAAATCCAAATAGTCAATAAGCATATAAAAAGGGGCTCAATCTAATCATTGAGGAAAACCAAACCCATAATTCAATA CAAGTACACACCACAAAAATTTGCTACAATAAAAAAGATAGACAATGCCCTAGTGTGGCAAGAATGTGGAGCAACCAGA ACCCTCAATCACTTCTGTGATAGTGTGATTGGTAATTGGCTTGAAAACTCTTTGGCAGTATCTACTAAAGCTGAAC AAATGCATAACCTATGACCCAGTAATTTAGTCCTAGATGTATCTCAAACAGAAATTGCATGCAACTTTTCATAAAAGAC TATACAAGAGTGTTCATGGTAACACCAGTATTAACAGACAAAAGCTGGAAAGTACCCAATGCCCATCAAAGAAAGAAC CACTAATAAATTTGTAATATATTCACAAGAACCCTAAGAATACAACTCTAATACTAATCAGCTGTGAGAATGAATGGATA GCATGTAGTTGCAACTACATATATTTAAAGATTAAATTAATCTCTCAACATAAGGTTGCCAGGCACAAAAGAATGCATACTA TATGATTCCATTTAAACAAAGTGCAAAAACAGGCATAAGGACTTCTGGGTGCTGATAATATGCTGCTTTTGTATCAG GTGAGTAGGAGAGCTACTGCCTAGAAGAGGGCAGGCAATGAGGACTTCTGGGTGCTGATAATATGCTGCTTTTGTATCAG GGTGCTGCTTATGTGGTGTACTCTTTATAAAAATGTATGTATGTATTACCTTACGTGCAATTTTGTATACATATTATT CTTCAATAAGAAGTTAATAGGGCCGGGTGCAGTGGCTTATGCCTGTAATCCCAGCACTTTGGGGGGCTGAGGCGGATGG ATCATAAGGTGAGGAGTTCCAGACCAGCCTGGCCAAGATGGTGCACCCCCGCTCTCTACTAAAAATACAAAATTAGCCAG GTGTGGTGGCAGACACCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATTGCTTGAACCTGGGAGACAGGTT CTCAGTGAGCCAAGATGGTGGCACTGCCTCCAGCCTGGGCAAGAGACTGAGACTCTGTCTCAAAAAAAGAAAGTT AATAGAATTTTTTTCATTCTTTTCAATTAACCTACCAAATCCTGGTATTGAGCTTACCATGTGATACATATAAATGCAAC CCCAGAATATCTCCTGATATGATCTCATGATGCCATGGGAAGCAGTAAGTCTTTTTGAAAAAAGCACTGTTTCACTTA TTAATGCAATACATTTTACCAGAATTTATTATTGAAACAAATCTTAGTGTTATTTTGTACCTGCTGTAATGCTTT TGCTTGTTTTTTTTATTATGGTAAGAACATTTAAATTGAGATCTACAATCTTAAATAAATTTAAGTAGACAATACAGTAT GTAAAGTACAGGCACAATATTGTATTGACAATCTCTAGGACTTATTTCGTCTTACATAACTGAACTTCATACTTATCT AACAGCAATCCCTCATTTCCTCCCTCCTCAGACCCTGGCAACCACTGTTTTACTCTGTTTCTCTGAGTTTAACTATTTTA ATTTCTTATCAAGTGAATCATGCCATGTTTTTTTCCCTGTAAGTACTGTTTCACTTAGCATAATGTCTCTAGGTT CAAACGTGTTGTTGCATATGGCAGGATTAACCTCTTTTAAAGGCTGAATAGTATACACACAACCACTACATTTTCTTT ATCCATTEACCTGAACATGAACATGTAGTTTGATACTATATCTGGCTATTGCGAATAATGCTTCAAAGAACATGGAAAT GCAATATCTCTTCAACATACAGATTTTATTTCTTTGGATATATGCCCCGAAGTAGAAATCCAGATCATATGGTAGT TCTATTTTTAATTTTTTGGAGGAAGCTTCATACGTTTTTCCATAATGACTGTCTTAATTTACATTTCCACCAACAGTGTA CAAGTGTTCTCTTCTTTTACATCCTTACTAACACTTCTTTTCTTTTGTCTTTTGTGATAACAGCTATTCTAATAGATGT GAGGTGATATTGTGGTTTTGATTGTCATTTCCCTGATGATTAGTGATGTTGAACATTTTTTATCTACATGTTAGCCATT TGCATGCTCTCTTTGAGAAATGTCTATTCAAATCCTTTGTCAATATTTTAAAGGGTTATGTGTTTTCTTGTACTGA GTTGTGTTGGGTTCCAAATATATTTTGGATACCAAACCTCTTATCAGATGTATGGTTTGCAAATACTTTCTCCTATTCCAT GGGTTGCCCTTTTCACTGTGTTGTTTCTTCTGCTTCTGTTGCAATTTTAGTTTGATGTAGTCCCCTTGTCTAGTTTCA CTTTGTGTTTGTGCTTTTGTATGTCATATCCAAGAAATATTGTCAAGACTAAGAAAAAGAGAGAAAACTCAAATAA ATAAATCACAAATGAAAGAGATGGTACAATTGATGCTACAGAAATCAAATGGATCATAAGGGACTACTATAAATAATT ATACACCAACAAATTTGGATAACCCAGAAGAAATAAATTCCTAGAAACACACAACCTCCAAAGATTGAATCAGGAAGAAA TAGAAAACCTTAATAGACCAATAACAAATGAGATTGAAATCAGTAATAAAAAACCTCCCAACAAAGAAAACCCAGAATC AAGGTGGCCTCATTGGTAAAAATTTTTCTTTTTTTTTTTTTTTTTTGGAGACAGAGTCTTGCTCTGTCAACCAGGCTGGAG TGCAGTGGTGCAATCTCGGCTCACTGCAAGCTCTGCCTCCTGGGTTACACTATTCTCCTGCCTCAGTCTCCAGAGTAG CTGGGACTACAGGCGCTGCCACCACGCCAGGCTAATTTTTTGTATTTTTTAGTAGAGATGGGGTTTTACCATGTTAGGC AGGATGGTCTCGATCTCCTGACCTCGTGATCTGCCCGCTTCAGCCTCCCAAGTACTGGGATTACAGGCATGAGCCACC ACACCTGGCCCCCTCATTGGTAAATTTTACCAAACATTTTAAAGAAGAATTAACACCAATCCTTCTTAAACTCTTCCCAA AAAATGAAGAAGAGGGGAACACTTCCAAATTCATTTTAAAGGCCAATGTTACCTTGATTCTAAAGCCAGAAAAAGACACTC AAAGAAAGAAAAATTTACTGATAAATATTTCTGATAAATATAGATGCAAAACTCCTCAACAAAACACTAGAAAACCTGAATT CAACAGCGTACTAAAAATACTAAAAAGGATGATATACTATGATCAAGTGAGATTATCCCTGGAATGCAAGATGGTTCA GCATGCTCAAATCAATTAATGTACTACATCACATTAATGGTAGGATTAAAAATAACATGATCTTAAATAGATGCATC TTAATAAAAGTTTTTGAATAAATTAACACCTTTTTCATGACAAAAACTCTAAAAATACATTAGGTATAGAAAGATTTTAC CTACATATAATAGAGGCCATATTTTTGACAAGTCTACAGCTAACTGAATACTCAGTGATGAAAGCTGAAAGCTTTTTTC TATAAGGTCTTAATCAAGGCAAGGACATCCATTTTTGCCATTTTTGTTTCAACACAGTAATGGAAGTCTTAATCAAAGGA ATTAGGCAAGAAAAAGAAGCAAGGCATCCAAATCAGAAAGAAAGAAAGTAAACTATTTCTCTTGGCAGATTACATGAT

107/375

CTTATATGTAGAAAACCCCTCTTTCTACAAAAATCTGTTGAAACAAGCAAATTCAGTAAACTTGCAGAATATGAAATCAA
CATGTTAAACTCACTTTTGTATCTGTACACTAACAATGAACATCTGAAAAGGAAATTAAGAAAAAATTTATCTACAA
TAACATCAAAAAATATAATATTTAGGAATAAACATAACCAAGAAGGTGAAAGACTGAAAACATATACAACGTTAATGAAA
GAAATTAAAGAAGATGCAAAATAAATTGAAAGACGTTTTGTGTTTATGGATGGGAAGACTTAATACTGTTAAATGTCCA
TACTACCCAAAGATCAATACAATCCTTATGAAAATTCAAATGGTAGCCAAGTGTGGTGGCTCACACCTGTAATCCCAG
CACTTTGGAAGACTGAGGCAGGCAGATCATTTTGGGAACAAAATGTAAAGTTGCTTCTAAAAGAGATTTATGAAGTTTT
TTGTTTACTCTATGTTTAAATTTATTTGCTGAGTACACTTATACATTGAGATGGGAATTTGAACAAGATCTTTGTACTTG
ATTAGAGGGAATAAAAAACAGCACACTTATCAAATAATCAGTGTGTTATCCATAAATTCAGCTTGTGGCTTGCTGAAAGT
TGACTCTTGTGTAAAGATTAGTTACTTTTTATTGTTTTAAGGCTAGAAACATAGGTTCTATTTTGTCAATGCTACTA
CATCCCACAAAGTGTCTATATGAGCCATTTCCAAATTTCCATTTATGATAAGGGGCTGTGATGCATGAGTATACCCACG
TTTTTACTGACATGTGTAGAGACAAACTCATGAGTTTGCCTAGTTACCTTTTATTCTGTATTCCATCAGATTTCCAAACCT
TCGGGGTTAGGCCATACTTTCAGGGAAGTGGGTGAGCTTTATTATTGAGGCCAAGTCTTCTATCTCTGTTTGTAGTGCAA
ACCTAGTACTTAGGGACCTTGTCTATCTATTTTCTGCAAAGTACTTTCTGTACTTGTCAAGATCAATAACTGGTTTTTA
TAATGACAGAGGACACAGAATTTAGCCTTCAGAACAGAAATGGCTATTTACCATGCGAAAGTATTTTTTTTTTCTGACA
CCATCAGACCAGTGAGCATAGATTTCTCTCTGAGAGACACTTTTTAAACACAAAAATTACCTATTTATCTTGTGTCATA
GCAGCTCTGTCAACTAAACAGTGCATTTAATAATAATGATAATACATAAAAAAGTCTAGTATTTTCATGGTTTACAAGATA
TTTTCCACATTAATTGTCCCATTGGACCCCCCAAAATTCATATAAGTGGTCAATAATGTATTATGCCATTTTGTATGG
GGTAACTGATGAGGTAACAGACCAGAGACTGAGCCTAGTTTGGCCAGCTAAGAACTATCAAAGCCAGTCTTCCCAACTC
AGTCCATGATCTCTTACTATTTTACTTCAGCCCTGTAAGATTTCATGGTTGTATTTCTTCCATATAGAAGTATGGAATA
ATAATTACTAATTTAGAATATTATATAGTCCATTTTGTACAAATTGTCTAATTTGTATAGTACTATCCTAGTACTAGTA
TATATAATTCATATACATAGTCATATATACTAGTATATAGAATTATATATACTATATATGTATGTATATATACACTAATAT
ATATAATTATATACACATATGTATTACATATATGTATATATTATATATACTAGTATATATACTATATATAACATATGTA
TATATAGGATTATATATAAATTATATACTAGTATATATAATATGTACTTGTATATAATTATATCTACATATATACACA
TATATGTAGTACTATATCTACATATACTATATATCTGTATATAGTACTAGTATATATAATTTATATATACATATAT
GTACACACATATAGGATGCTATGAGAATGCATAGGAAGGGAACATAGTCTTAGAGTATCATAACTTTCACTCTGTGTC
CAAAGTCTTTTCAATTAATGATACCAGAACATAGGATCTACTGAAATTCTAAATGGCCAGTTGGAAGAGGAAGGTTCATGT
TTGGGGAACCTGGTTAAAAATTACCTTTAGTGGAAAAGAAAGATAATAACTCAGTAAAAGTAGCTAGAGGCTGGAGCA
GAGTGTCTATGTTTGTCTATGGTTTGTAGTGTATCTCCAAAATTCCTGTATTAGAACTTAATCCCCAAGTATGACAGTGC
TGATAGAGTGGAACCTTTTAAGAGGTAATTAGGTCTAAGAGTTCTTCCATCATGAATAGATTAATGCTGTTATCATGAG
AGTGGGTTAGCTATTGCAAGAGTGGCTTTGGCATAAAAGCAAGCTCTCTCTATTTTCATGTGCTCTCACCGTATGATGCT
TTCTGCCGTGCCCTTTGTCTAGGTGCTGATACCATGCTCTTGGCCTTCACAGCCTCCAGAACCATAAGCTAAATAAACTTC
TTTTCTTTGTAAGTTACTCAACCTATAGTATTCTGTTATAGCAACAGAAAGTGGACTAAGACAGTGGTTTAAAGTCTGG
ATTTCAAAATGAAAACCTGAAAAAGAAAGATGGGAAGAGGTCTTACAAAATATCAAATTAGGCTCAATTTTATTGAC
CACAGTTTCTTAAACATAGATATCTCTCATATATTATCAAACACTTATGGTGAACACTACATTTTGTTCATAGGAGT
TCTCCATAGCAGAATTCCTCCATCTCCCTTTACTTTGCCCTGAAAAATCAGCACCCAGGAATTTCTTTATCTTTCAA
GACGGCAACATATAAATAAGCATTGTAGTTTCCCATACAGGAATTTTGTCAAGTCTGGCTTAGAAAATGGCCATGTTT
TATTCAAAACTCTTTGAATTTCTGGTTAAATAAAAAATGCCAATATGCCTTTTCAATTAATAAGTCTATCTTTTCAATTA
TCTAAATGTATGTCTCTACTATAAGTTCCCAATGGCAGCTATGTCCTTGTGCTTAGGGATTGCAAGATGAAGGTTAACTA
TTAACGACAGTGTCTTGAACCTGAAGTTTATAGAAAATCTTTAGGGACTCCTTGGACTCTTGGAAATTATGTACAAAA
TTATAATGACTCATTTGTACAGTCATCCCTTGGAACTCTGTAGGGGATTGATTCCAGAGCCAAATACCAAGACTGCAGAT
ACAAAACCCAGTGGATGCTTAAGTTCCCTTACATAAAATGGTATAGTGTAAATTTAATTTAACCTATATTCTTCCATACACTT
TATCTCTAGAATACTGCTAATAACTAATAATATGTAAATTCATGTAAATAGTTTGTATATAACAATGATTTTTATTATT
ATTTTTGTGGTTGTATTGTTACTTTTGTGGAATATTTTAAATCCCAGTTGGTTAAATTTGTGGATGAAGAACCTACTAA
TATAGAGGGTCAACTGTACATTCTCTTGGGAAGTATATTGAGAGCTTTCATTAGAGACTTAAAAGGAACCTATGTTACT
CCCCTGCCCCACCCCCAAAAAAGTTAGGAACCTACTGCTTGGTGGGGGTAATAAACTATCCTTGGAAACATCAGATTCTTT
AGATACATCATAGAGAATTGGCATCTAAAGAAATATTTCTGTGGTAACCAGCTTCCAAGATGGCCTCCAGTGATCTGCAC
TTTCTGGTATTTCAGATTTTGGGGTCATCTCTTTCAAATGTATCAGGGTTGATCTCTGTGGCCAAGAAAATTCAGGAG
GAGTTATGATGTGCCACTTTGGAGGTTAGGTTATAAAAACTGTGGCTTCTGTCTTGGTTACAGTTTCTCTTTCTCCAAT
CACTCACTCTGGAGGCAGCTAGCTGTCAACTCACAAAGACACTCAAGCAGCCTATGGAAGAAGGCCACATGGTAAAATA
TGGAGGCCTCCAGCCAACAGTCAGCAAGGAACCTGAGACAAGTCAACAACCATGTGAGTGACTCGAGAAGTGCTTCTCTA
GCTCCAGTTGAGACTTGCAGTAGCAGCAGCCTCAGCTGGCGGCTTGAAGTCAATCTCTTGAAGAGACCCTAAGCTCTCCT
GAATCTTGATCTCTAGAACTGTGTGAGGTAAGAGATATTTGTTGCTTTAAGATGCTACATTTGGGGGATAATTCATTA
CACAGAAATAGATATCTCATTACATTATCTTGACTGGTCATGATTAAGAGAAAAGTGAATGTAAGAAAATAAAGTGTT
TTAATGCTGACCTTCCCTGTTAATCCTAGAAAATTAGAGTTTGAATAATAATGTATAGTCACTATTCCTTTAATCT
TGTTGGTAAATAATGAATGCAGCGTGGCCCCATTCCGCCAGCACTTGGTCACCATTTGTGATCTACACAGCAAGAAGCA
GCCTAACGACCTGTCTGTTGAAACAAACAAGTTTTCTTTAAGTGATTTCTTTGTTTCCATTTATAAGGCACCAACTTT
CAAAGGTGTTCTGGGAAACCTTTCTGTATTTCTTCTAAGCAAAATCAATTCACAGAGAGTTCCAGCTTTGCCTGTGA
TCAATGGGGAAGTACCAGTGTAGCTTTCTTTTTTTTCTATAGGGCTGCTCATAGTCTCCGATAGACTTTACAGCTGT
TAGTTTTGCTGCAGTAGTGACTTGCTAAAATGGTGGCTCATTTGAATGGTGTGTTGATTAATTTACACTCCCAACA
GGGTACAAGGGTCCCTCTTCTCCATATCTCCCAATATTTATTATCTTTTTTTCTTCTTCATAATAGCCATTCAACA

Fig. 6. 102

108/375

[illegible]

109/375

TCCTTCTATGTATTGTCCATTATAACTTTGTAATTTCTTTTGGGCAGGATCCTGTGATTGGTAAATTTTTGTTTTCCCA
TGCAGTTTCTAGGCTAATGCTTTGCATGTGTAGGTACTCAATGTAAAGGTACATGTTTTAAGTGAAAGGACCCAAAATT
CATGACTTGCTGTACAAATGATGATCAGGGTTTAGGAGAGGAGATATAGACCAGAAATCTAGTTGTTGTTTTGAGTTAT
TATTATTACTTAAATTATCCTATATTTTTAGGTTAAAACTCATTGAGCAAAATCATTATCTTGATGAGAAATCAAGAGT
CAGGTTAAGTAAATTTATTTTTGGTTAGATGTCTTCTAAGCATCAGTTAAGGATTCAAACCAAGGCCCTCTCCCATGTGAA
AACATATATTGTTTTCAGCTTATCAGGATTGGTTAGATTATCTCCAAGATTATGTCTATTTAAATGGCAGTTATTGCAGA
TAATATCAATGTCTTAGGTCCACAGGAAGGCAAGAAGTAGACTTAGCAGTAAGTTGCTGAGCAGGAATTCGAAAAGGG
TGACCAGGATCAGGTGAAGCACGTCCAGAGAGTAAAGGGGGTAAGCAAGCTCTTGTTATTAGCCCATATGTACTTACCC
TGGGCTCACCGAAGAGTCTTAAAGCAAAGCTTGCTGTGGCTGCAACCTAAGGATTGGAACAAGTCTATAATCCTTCAAG
AGCCAAGTGTGGATTTCTCCCTTCTACTCTCTGCCTCAGTATATTTCCATGTTTTCTTACTTGTTCTGTTGCTGGAAG
TTTCTTCTTTTCCAAGAGATACTCAGTTTAAAGAAGCCACAGGTGTCTTTGCCAAAGCTTGCTCTGTCATCCTGTTA
CACTCTTAGAGAATCCCTGTATGACGTCACTCAAGACAGCCTACTTTCGTAATTGCTGTGGAAGGGCGAGAAGGTCCTG
CCACTACATTGCTTTCTGTACCCACCCCAAGATGGAAGAACAGGTTGTCTCTGAGGAATTTGATTGTTGGGCGACATT
GATTCCAGTCTCTCTTTACTGGAGCTTGAAATAGGGGGGCCAATTTTCTATAAAAAAGAGTATGAAACTGATATCCAA
AGAGACACACGATGAGAATCTATGAACTCCACGAAAAAAGAGCTGATAATTATAATTGTCTTCATTCTTGGTAGCTTTC
TAGATGGGTTCTAATCCCGCAAGGGGCTTAGTTGCCTTCTAGCTTTGGCGTCTATAAAATAGTCTTATAACCTTTTAA
TAAAGGTTTAAATAAAGGCTAAGCCACATGAGTGAGTTTATACATTCAAACAATCTCCTAAGTGTGAGAGTTAATTA
ATTTTTAACTATTCTCGAAATTCAGCCTTAATTTGCTTTTGCTTAAAGCTGGGTCACTAATCTGTGCTGAGGACCCATT
ATCCATTCTTTGTTAGGTTCTACAGTTTACCTTAGGGTACATTTCATAGTCTTAAATGTCTCTTCTGTATAACTGATT
ATTTATGGAATTTTCATGATGCGTTAAATACTTTGGCTGAGTAGCAAACACATTTTCATCTAATCTTTCAATTCACAACA
GTACTACTGGGCAACATTTTATTCTTGGTGGATACAATTTCTTTCTTTTTTTTTTTTCTCTTTTATTCTTCTCTCC
TTTTCTCTCTCTTTCTTTCTTTTAAATGTTTGTGATATCAGGATATAAAGAGCCAGGTAGAAGAGCACAGAATTAGAAA
CCAGAAAACGTGAGTCTAGTCATCTCATTTCTCTCTGGCTTCACCTTTACCCCTAAGTGAGGAGACTATACCCGAGTTCC
ACCTAGCTTGCAAATTCATATAATTCAATTATTCCATCACCATTCTGAAATATAACCATGTAATTATAGAAATTACTAGAA
AATTTTTTGAAATACACATTTCCCAAATTTATTTGACCATGGAATACTTTTTAAATAATTATATATTGGTAGAACATAT
ACGATAGTTCATGGATATAATATGCACCTTTGATTAAAGAATACAAAAAATGGTCTGCAACAATTAATTGCTTCAAGAA
ATGATTAATAAATTCATTCATATTCTAATTAATTACAGGACCAAACAATAATACAAATTAATAGATTAAAGTCATTT
TATTTTTATTAAAGTACATAAAAAAGACAAAAATGGATGAAATGATGACAAAGTTGCATAACATGAGGAGCAGTGATGATTAA
GAGGCAGTGTATACCAGTAAATTAGTTGGTAAATACTACTAATAGATACCTTAGCATTGACATTAAAATTAATATTTAT
ATGAAGCTTTGACATTTAATTTCTACTTCTCATGCACTCATGATACACCCAATCACTTGTTTTGCAATTTATTTCAATGTGGA
TTCTTGTCATAATAACAAATFATAGATGTGTGTTTAAATATATTAATATATTTTATAAGAAACAAATGTTGTGGTAATTT
TTCTTCTTAGACTACTCAGTATCTTATAGTTTGAGAAAAACAGACCTATCTGAACCTAGATACTATATATGTTTCCAAC
GAGTAGCCTATTTTTCCCTTCTCTTTTCTCTATTGCTCACGTGCTTACATGCATTATTATTGGGTTATATATTGAGTTA
TTCTCTCGTTGGCTTTTGTAATCTGTGGCATTACATATCTTTGATAGCAGTAAGTTTGACACTCAAATTTTGTTAGAAAGT
CAATGGCAGTGGTCTTTTATAGGTTTAACTTACCTGACTGCAITATATCCCTTGAGAATAGTTTAAAGGGATTTTCA
TTGAACTACTGTATATGATTAAACATATAATGCCCTCTATTATGAACCTTGGAAATATGCACATTAAAAGAGTTATAAGTT
ACAGTTAATCATTGTTGTTTCTTTTATAGATCTTGAGAAAAACCTGATGAGTGTAGCATTGCCATTTTGTAACCT
AATCCTTCATGTAATGAACCTAAGCTTCCATPATTTGTAATGAATTAGTCTATTTAGGAACCGCTTTGGCTTAGCGGTG
AACTGTATTTCTTACTTAAGGAGCCAAACATTAGGAAGCAACTGTAGCAGTGTAACAGCAGCAACTTCATCATTTTGGA
TTTTAAATTTCTACCTTCAGGGATCTTAGAACCATCCTAGCTTCCGAGATCTCACTGTGAGTACTGGAGTGAGCAGAGT
TGTACCAGGATGGAGAGATTGCTAATTTCCAAAAATGGGATTACTGAGTTAAAAATATAATCCTGCTTTCAGCTAAAAAC
AAAAAAACCCAAAAAACCAACAGCCCTTTATGACACAAATTCATATCCTGAACGCAATTTTATTTTATTGATTATA
AACAAATGTGAATGTAGATACCAATATTGCAATATGACTAATAATTGGAGGCAATTTATTTATAGTATTATATATATCAT
ATATATATTTACCATTTTACTGATATTAATGACTGTGGCTTTTTTAAATAGTGGCCACAGAAGTCACATGATGATGGTTA
GTGAAGTTTGGTTCACATTTGTAGGCACCTCAGAAATATCATCTTTTGAGAACACACACACACTTAAGTTTCAGTGAGAAC
GTATATAATTCAAAGAATAACATAAGCAATGATTTTAAATTTCTATGTATGTTTTCAGTCTGCCTCAGTGTTAGCAGCAGG
AAAAATTATTTCTTACAAATAATGAAAGACATTTCCAGATTCAAAAAAAGGAAAAATAAAAAACCATGGAATAATATAT
TTGGAATTACAGGGCTACTAGCAATCTAAGTGTTGTGGAAAAATCTGGTAAATAGTTTCAGTGAAATTTATATAGATAGAA
GATTGATTGAATAAACCTACTCCAAAGCATTGATATGCCACAGCATTTCTCTTTGGCTGTGTTCTGCCCAATATTTTA
ACAAGGGGTTGCATCAAAACAGAGTGATGCTGATCAACTCCTGAAAAATATTTAAAGTTAAAGAAATGCTAAGCAAAA
AGAACAAGCTAGAGGCATCATGCTACCCAACCTCAAACCTACATGCTACAGGAATACAGTAACCAAAACAGCATGTTAC
TGGTACAAGAACAAACACATAGACCAGAGAAAAAGAAATAGAGAACCAGAAACAAGACTGCATACCCACAACCATCTGT
TCTTTGACAAACCTGATAAAAAACAAGCAATGGGGAAATCATTTCCCTATTCAATAAATGGTGTGGGACAACGGGCTAGC
CATATGCAGAAAACCTGAAACCTGGACCCCTTCCCTTACACCATATACAAAAATAAATCAAGGTAGATTAAAGAATTCAT
ATAAAAAACCAAACTCTAAAAATCCTGGAAGAAAATCTGGGCAATACCATTCAGGACATAGGCACAGGCAAGATTTC
TGACAAAAATGACAAAAGCAATTGCAAAAAAAGCAAAAAATGACAAATGGGATCTAATTAACCTAAAGAGCTTCTGCA
CAGGAAAAAGAAAATATTAAACAGAGTAAACAGCCTACAGAATGGCAGAAAATTTGTTGCAATCTATCCAGCTGACAAAGGT
CTAATATACAGCATTTATAAGGAACCTAAATAAATTTACAAGAAAAATACAACCCCATTAAGAGTGGGCAAAATACAT
GAACAGACACTTCTCAAAGAAGACATTATGTGGCCAAACAAACATATGAAAAAATAAATCACTGATCTTTAGAGAAAC
CCAAATCAAACCAATGAGATACCATCTCACACCAGTCAGAATGGCTGTGATTAAAGAGTCAAAAAACAACAGATGC

110/375

TGCTTATGGAGAAAAACGAATGCTTTTACTCTGTTGGTGAAAGTGTAATTAGTTCAACTATTGTGGAAGACAGTGTGG
CAATTCCTTAAAGACCTAGAGGCAGAAATATCATTTAAACCCAGAAGTCCCATTTACTGGGTATATACCCAAAGGAATATA
AATCATTCTGTCTATAAAGACACATGCACGTGTATGTTTCATTGCAGCACGTGTTTACAATAGCAAAGACATCTAAATGCCT
ATCAATGACAGATTTGGTAAAGAAAATGTGGTACATATACACCATGGAATTATGCAGCCATAAATAAAGAATGAGATCC
TGTCTTTTGTGGGAACATAGATAGGGCTGGAGGCCACTATCCTTAGCAAATTAATGTAGGAACAGAAAACCAAATACCA
CATGTTCTCACTTATAAGTGATGATCAGAACGCATGGACACATTGGGAGTGGGGAAACAATACACACTGGGGCCTTTCA
GAGGGTAGGAGGGTGAGAGGAGGGAGAGGATCAAGAGAATAGCCAAATGGATGCTGGGCTTAATACCTGGGTAATGGGAT
GATCTATGCAGCAAACCACCATGGCACAATTTACCTATGTAACAAACCTGCACATCCCGCACATGTACCCATGAACCTTA
AAGTTGTAAAGTAAGAAGAAAAGAACCTTGTCTAGATGCAAGTTAACTCTGAAAAAAATTTATATTAACCTGAGCACACTCC
CAGCCCCAATAACATAGGTGTTTTTGTGTTAGCAAGGAATAAGAAAAGAATGGATATTGGGTGGATACCTAATAGTAGTC
TTTGTCTAGACTGAATCGAGCAGATATAATAAAAAAGGAATGTGTGACAATGCTATGGTTTAAAAATAACATGATACCCA
GCACCTTTGGTAGGCCAAGGAGGGTGGATCACTTGAGGTGAGGAGTTCGAGACTAGCCTGGCCAATATAGTGGAACCTTG
ACTCCACTAAAAATACAAAAATTAGCTGGGCATGGTGGCAGACACCTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGA
AATTACTTGTACCTGGAAGGAAGAGGTTGCAGTGAGCTGAGATCATGCCAGTGCACTCCAGCCTGGACAACAGAGCAAG
ACTTCATCTCAAAAATTAAAAAAGATAGTCCAGAAAATAACAAGACACAATCTAACAGGAAGAAAGGTTAATT
TCTTATTTAGGCTTTAAGAAAAAATTTTAAAAAGCAGTAGCGCAAGTACAGAAAGACCTCATCTCATAAAAATGGTA
GTTAATTGCAAGTACTGTATCAATATGTGATAAGTCTATCTTAAAAATCTTCTAAATTTGAATCTTTCTTGAGGGAAAGA
AAATCAACATTAATTGAAATATTATGTCTCAGACAAAGAAAGGTAGCAGTAGTTTCATTGTGCTCAACAATTGTGACACC
ACCTATGGAATATCCTGTACAAATGAAAAATTACAAAGTTTCCAGAGTGTGTTCTTCAGAGCAGTAGCTCTTAGAACATT
AATGATTATTATGAGAAGGGAAGGTCTATTGTCAAAGAAGCTTGGAAAGGATGAGTTGTTAAGCAAAGGTGTCTTTTG
AGCAGTACTTTTTCATGGTCTTTAATATACCAATATGCATTGCAGCTGTCCAAGACAGGAGGCCATTAAGGAAGCCTGAA
GAGAAATGTCCACCTTAGTGTCTGAAAGGATATGCACCTCTATAGCTATTTACTTTTTACTTTTCATCCCCTGACC
TTTCTTCCAGCACTATGGTCTCTCTCTCATCACTTCTCTCTATTTTGATTATTTTCTTCTCCAGTGGCTCCTAACTTCT
TTCTACAAATGCATTTGCTCTGTCTGATAAAAAATCATTTTAACTTTGCTTCTCCATCCAGCTACCTTCTTTTTTTTACCC
TTCCTGTTACTGCTTCTGGTATTCGATGGTTTTTCCCTTTTCCCTTCCCCCATTTTTTGAACGATAGACTACTTTTTTTTCA
TAGCTCATCTTGCACGTTAGTCTTCCATGAGATATGCCTGTAGGCATGCACAACCTAGAGATGTTAAGTAGAGGCAGAAA
GAAAAGAAAGACATCTGGCAATTAGATCTGACTTTTATCCATTCTGGCTGTTATAACAAAATAGCATACACTCAGTAGCT
TACGAACAATAGAAATTTATCTCCCAAGTTATGGAGGCTGGGAAGTCCAAGATCAAGGTGCCAGAAGATTTGATGTCT
GGTGAGGGTGTGCTTTCTGGTTCATAGTTGGCACCCTTATAGTTGTGTCTACATGGTTAAAGGGGCGAAGGGTCTCTCTT
GGACCTCTTTTATAGGGCCACTAATGACATCTCAAGTGCCCATCTCAAAATATTATCACATTAGTGTAGGTCTTAG
AATATACATTTTGAAGGGACACAAACATTTAGAGCATTCCAAGGCTCTTATTTGTTTTTTCAGTGGTTAAGAGTTTCGTCA
GGGAGGAGGAGTAGAATTATGTGAGCTTACTTCAGAGCAGAGTTTACTAATCTTCTATGTGTGTATGGAGTGGGGTGT
AAATCCTGAATCCTTTAGTAAGAAGGGTACACCTATGAATGCCCTTCTCAGTACACTTGGCCCTCTGTACCCATGGGTT
CTGCATCCTGGGATTTAAGTAACCATGGATCAAAAACCTTAAAGAGAAAAGTTTGCACCTGGACATTTACGGATGTTTTTTT
CTTGTGATTAATTTTCTAAGCAATACATTATAACAATTACTTTACATAACATTTACGTTATACTAGGCATTACAACAAATC
TAGAGATGATTTAAAAATATATGAGAGGATGTGAATGGGTATAGGCAAACACTATGCCATTTCTTATCAGGGGCTTGAG
CATCCATGGATTTTGGCGTCTGCCAGAGGCTCTGGAAGTAATCTCCCACGAATACTGTGGGACAACCTGTATAATAGTTT
TTTGTGTTTTTGTAGTTTGTGTTTTTGGAGACAGGGTCTGCTATATACCCAGGCTGGACTGTAGTGGTGTGATTGTAGCTC
AGTGCAGCCTTAAACTCGCAGTCTCAAGCGATCCTCCTGTCTCAGCCTCCCTAGTAGTTAGGACCACATGTGTGGGCCA
CCACCTGGATCATTTAAATTTTGTGTTTTGTGGAGATGGGGTCTCTACAAAAGAGATGTCACTTAGGTAGGTCTCAAAC
TCCTGGCCTCAAGTGATCCTCCTGCCTTGGCCTCCTAAAGTGCTGGGATTACAGGCAGGAGGTACCACACTCAGCCTGT
ATAATGTTTATAAGCACAAAATAAAATTTGTAGAATTAAAAATGAAACCAGTTGTATTAACAATAATATACAAATATTA
AAATAAAAATTTGGTATAGTTATATATGTGCATCTTTATTAATGTATTAATCATAAGATCCAGCAGATCACATATCTA
ACATACTTAATTTTGAAGTGCTTGCAAGAAGTCTAATGAGATAAGAAGGTATCTATGATTTTTACTGGCAACAAAGTCA
CAAACCTACAGTGGTTTGGTAACTATATTCATAATTTGAAGAAAATGGTATTTTTTCAGTTACAAGTTAGTAAAAATACAGA
TGTAACCTTGTCTACAAAGTTTACCAATCTCCTGAATCTTTGTGGACTCCAGGTTAAAAACTACTAAATGGTAGAGTA
TATAGTTACAAGGAGTCAGATTTAAGCTCATTTTAAAGTATATGTATTATGTGTATGTAAAGCCTTAATAATTAAGATGT
CCTAGAATGAAAGGATTTTCTCACAAAGTAGTGATCTACCTGTTAATGGAAACGTCCAGTTAGCATTAGAAAGAAATAT
GAGGATGTTGTAGTATAACACTAATTAATATTAGCTAGCATCTACTAGTGCTTGCTGTGTTTTATGCACTGGGTTAGG
AGCAATTTTGCATTGTGTCTTTTTTTTTTCATAGTAGTATACGTACAGGTTATCTCTGTGTCTATAGATAATACAATTTAGGT
TTTGATATTTGTAGAAAGTTGACTATAGCCTGCAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCACTTGAACCC
AGGAGGCAGAGTTTGGAAATGAGCCAAGATCACACCCTGCACCTCCAGTCTGGACAACAGAACGAGACCCCGTCTAAAAA
AAATTAATAATAATAATAATAAAGTTGACGGCAATAAGTGGCAGAGTATGAACCTTAACCCATATCTAGGTGTCTCC
AAAGCCTATAATTTGGAGAATATTTTGATAATAATGTAGGAGAGAGATTGGTGAGAGAATTAGAGATCACCTTGTTCTATC
CTCTTTATTTGATAGATATGAGGACACTGAGAACTCAAAGAAGTTAGGTGACTTACTCCAGGTTACACAGTTTATAGCA
GAGCCAGAAATTTGACTTTTGATGCCCTTTTTATGTGGAACATGAGCTTTTATTATTTAGCTCTTCATCTGGTGGAAAGTG
GAACACAACCTGAAGAGAGAGGCAATGGACTACACTATGGTTTGGAAACAGAGTGTATAGTAATTTCTATTTTCAATTTAG
ACAACAGGGATATGCCGTAAAGTGCCCTTTACCCATGTCTATGCAATTAATCACAATGAACACAAAATTTACTTGAGTAAT
TTTTTTTTTCTCGAGGTATAGTCTCGCTCTATTGCCAGGCTGGAGTGCAGTGGTGCATCTCGGCTCACTGCAACCTC
CGCCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCTACTTGAGTAATATTTTAAATGTAACCATAGTGAACCTGT

111/375

CCAATACTAAAATTTGTGCCTTTGATAATATTTATATTATGAATAAAAAATATGCTCTTTTAAACCATGTCCTCATCTATT
TTACCAGAAAGTATCTTGTGTATTGTCAATACAAAGTATCTAATGCATGAATGACTGAGTATGATTGTCTGGTTTTCTT
TAATCACTACTTACACCAAATAATTGGGTATTTACAATATACTGATTCTATTATTTTTTACTGAAATATAATTATAGTT
AAATTTACCATTTCGTTAACAATGAGGGAAGAAGTTGTCTAGATTAGTTCAAAAACCAACATGTAAATTTCTTCTGGAAT
ACGGTAATACATAAATGAATATGCAATAAAAGTGTGAAAACAATTTTTTAAATAAAAACAGTTAAATTTAATTTCTAAAAT
ATACAGGGATTACACTAACAAATTTTCTGAGTATGAAATTTAGGAAGCATGCTTTTCTAAAATGAATGCTTTTAAACA
TTATTTATAAACAAATGTTGTTTTCTAATATTTTATATAGCCTACATGCAATAGGTGCTCAATAAATACTCATTAACCTTA
GTTCAAGATGTTGACAGAACACATGGTTTTTGTTTTTCTTTTACTTTTCTTAATACCCATTTAAAATAGTAGAAAACTAA
ATCTGTATAATGCACAACAATAAAGAGAATGGGGAAAAGGCCATCAGTGGTAAGAGATTTTATCGAATTTCTGGAAGAT
GAAATATGAGTGAGTGGTGTGATTACTGAAGCAAAACAAAGTCAATTATTGCAGAGAATATTTGTAGAGGGAGCTACA
CCCAAGAAGAAGCCCTAATAACATGGCAGAAGCTAACAAAGGCTCCAGTTTCAGATAAGCCAATGCTGATGGACATTGAA
ATGAGAAACATAGATGTAATCAGCATTGTGATCAAGAGCATGTGCACTAGTTTTGTGCTGCCCAATGAGCCACTTTAAAT
CATAATGGCTTAAAACAACCATTTATTTAGTTTACTATTCTGCCTAGTCAGCCATTTTGGCTGGGCTTATATGGGCATA
TTCCTGTGCTTTGTCTCAACCAATCAGTTGATCAGCTCTGCTTCTGCAGGTTGGTTGGGTGTCAAGTATAGCAAGATAGGG
GCCATAGGCCCTTGCAAAATCTCATCAGACTAGTTTGGGATTGTCACTTAGTAGAGGAGCAGGATTATAAGAGAAATAAT
ATAAACGCAAGATCTCTTAAAGTCTAGGTTTGAATTTGGCACACATTAACTTTCATTCTTGCATTGCTTGAAGTAT
AAGACCAGTCCAGATTCAAAGGATATCGCAACAGACTGTTATTTGTTGATGAGAAGAACTACAAAGTCACATTGCAAAA
GGGTGGATACAGGAAGGTATAAATCTTGAGCATTTGTGGGTCTAACACAATGTAGAGGGGCCAGCTTTATCCTTCTCT
ACTTACCACATCTGTTCTCAGCCCCATACTAGAATACGTGGCATGAAGCCAGGTATTTACCATCACCTCAACAGAAGCG
AAAACAAAGCAAAACAAAGTTTATTTAATGAAAACATTAAATGAAAGAAAATAGATAAAATATATTTAGGAAAATCTCT
TGGAAAGAGTATATTAATAGATTAGAGAGTGTGAATGAGGTTTGGAAAACCTTGAGGGTGTAAATTTGATGCTAGAAAC
ATCCTTCTCTGAGTGGCCTACTAATTTCTGACATAGGAATCAGAGAAAAGGAAATGTAATCTTAACTATTTTCACTTTGCA
GAAATAATCTTTACATAGTCATAAAAAATGAAAACCTTGTTTATAGTTTTCAACTTTTGAATTTGCTCCATAGACAAGTC
/ATATAAGTCTTAACTGTGTATCAGTGTAAATGTTTTCAAACTTAAACAATATTAAAAACACCAACCTGGGACCCATAGGCA
CAGACATATCTTTTACATCTTTTGAAAATTTAAAGCTCAATGTGATGGTCTGTGCTTGAAGTCTTATTTAGCCAAACCACTG
TGTCATCTTTTACTAATACTCTTTCCCCATGATAGTAGCCCCAAGACAAGTAAGCTGGTCTAGAGGCTCAGTGGATGTT
CAGTGACAGTGCAAGTCATCACCCTTTACTTTTGCAGATACCACAAAGCTGTTTTTAAAGAGTCTCTTGCCATCCTGCC
TATGACTTTGTGCAGTGAATCAGTTGAGTTCATGGGAAAGCAAATAAAAGGATGGTCTCTGTTTATAGACATAGCCCT
GTCTTAGAAATCTAATCTCTCTTATCACTCTCATCTACAAAGATGTCAAGGAAATGTGTCCTCTCCTCCCATGGAGA
CAGATTGGGCATCTCAGATGAAAAAATATGTCTTTGAACTTGCCCTGAGAAATTCAGTAACTTTTTCTCACCAGGAT
ACTTTTCTAGTGTAAAGCTTGCCAAATATTGCTTAATCTTAGAATAGGAACCCATCTCAATCAGCAGTGCACACCATCCT
GTTTTGTGCTAGTAAAGTTTAGAGCTGTCTAAGTCCATTTGAGCTGCTACAACAAAATGCCATAGACTAGGTAGTTATA
AGTATCAGAAATTTATTTCTCACAGTTCTGGAAGCTGGGAAGGCCAAGGTCAAAGCACCAGCAAATTTGGTGTCTGATG
AGGGCCCACTTTCTGGCTTATAGATGGTGCATTCTACCTGTGTCCTCATATGGTGGAGGAGACAAGTCAGGTCTCTGG
GGCTCTTTTATAAGGGCACTAATTTCAATTCATGAAGGTTCTCTCTCATGATATAATCACCCCCCAGGCCCTACCTTC
TAATATCATCACATTGGTGATTAGGTTTCAGCAGATGAGTTTGGGGGAATACATTCAGGCTGCAGCAAGGTCAAAAAG
AATATTGCATCATTTTGTCTTTAGAGACCTTTCTGTTCTAGCTACATTTTGATTATCTATATGACACAATAAAAAAGAAA
GTCAGGAAACCTAAGATCTTATACTTCAATAGAGTTTTTATAGGACAACATTTGATTAATGGCTACAGTTAATACAAAA
CTCTAACAGCAGCAATCAAATATTTCCATTCATCACTTGAAAACCTTGGCCTCAGGTCTATGGTATTTTGAAATTTTTT
GTTGTTGTTTTTGGAGAGTGACATGAGTGCAGGCCAGCTTCATGGATATACAACTATACATTCACATGGGTTCCACACC
TAGATGGGCTCTTACATCATGTAGCTGGTCTTACCTGGGAGAGAGCTAAAAATTAAGTTGTCAGTCATCAAATTTACTGAT
CAGATACTGAAATTAACCTGAAAAGATGTTGAGAAGCCAGAGAAATTTCTCAATCATGTTAATAATACTTTTCATGCATTT
GACATTTCTTTTTTCTGCTCTTCTCTTACCTGTAGAACTTTTCAAGTTCCATTATTATACCATTTGTTGGCCCTTTG
TTTCTCTCTCAAAGACTTAAAGAAGAGTTATGATTAAGCATATGAAATATGCATACCAGGTTTTCTATAAAGATTCC
TCGGCATCTCTGCCAAGCTGTATATGAGCACTTGCATGTTGTTATATAAAAAACACATATTTTAAATAAATTTTAGTGC
TGTTCTAAGCAAAAAGCACATATTTTAAAAATCTGGAGTTTCTGTTTCAATTTGAGAGAACTACATTTTGTCTTAATTA
CTATTTAAATCACTGTAACACAATATTTGATGACAAAAATTTGAGTTTGTCTTTTAAATAAATCTGTCAATCAAAGAAATAAC
ATAGAACCTTTGTTTTTCTCTCTGTTAAGGCATGGCTTAACTGTAATTTACTTGAAAAACATTATACTGTTTGACAGGAA
AACAGAAACCACTTGAATTTATTTCTAACCCATTTCAGATTTAAGAAAAATGCATCGTAGCAAATTAAGTCTATTTGGTTTTT
GATCATTTCTGTCTGTATCATAGAAATATGGTTTCACTAGTGAATCAATGAGAGATAAAAGGTGATCATGGTCTGTGAGAT
AAATGCTGCCCTCTGAGTTGCTTCCAACGTAGCCAGCTTCAGTGTATCAGTTAGAGTAGTTAATACTAACTGTTGTAA
CAGATAAATACCCAAATCCCAGTTGCTCAAACAATTGAAGTTTATCTCTCATTCATGCTAAGTCAGTTGATGTTTCTGG
TTCACCAGCTGCCTTCCACCTGGTCACCCAGACACCTGGGTTTCTTCTATGACACCTGTGGCTTCATTTTCTCTCAA
CTTCAGACTTCTCTCCATCAGTATGTGAATAGGGAACCCAGAGATGTTTCTATGAGCAGGCCCAGAAGTGGCTTATG
TTGCTTCCATTTACCTTACATCTACATGCTTATACAAAAGAAATGTGGTCTAGCTATGGGCCCAGGGAAGAAGGAATGA
ATTTCAATGACTCTCTGCCACTCGCTGCTTAAAGGTGAGTGAATGCACTCTATCCAAATCAATTTCTTTTTGTAAATC
CTTAAACAAATGTGTTGTCATCCATATTATTTTATAACATATGCTGTTTCTTTTGGACAGTATTATTTCTGTAGACTT
CTTGACTGATACATCCCAAGATCATCTTTACTGACTTAGGGTTACAGTTTGGATAAGTTATCCCAATCTCAGGAGTTT
AATATGCCCTTATGTCAGATCTTTTCCAACCTTCTAGGTAAGAAGTAACTCATTCCTAATCTTACTACTTGGACATAGTC
TCTCCCTGCTACCATGTCCTCACAGGACCTCTTCTTGGTTTCAATTTGCAACTATCTCCAGTTTCTCTTTTCTATCT

112/375

CTGGCTTCTCCTTCTTTATCTCCCTTTTAACTTCTATTTTGAACCTTAAGTGTGTGGCAATGCCTCAGGCGTGGTCTCTCT
TTTTATTGCGCTTACACTATACITCCCCATGCTCTGATTTTCAATGATCACTTATATACTAAGGACTCGCCAATTTGTATA
TTTCAGCCCATATTTGTCTCTCTGGAACCTCAGACCTGTATATCCTACCGCTTTTTTCAATATCTTCCATTGAGTGTTCAGA
GGCATTTTTAGATCCAAAATATCCAAAACCTGAAATTTCTGTTTTTCCCTCACAGCCTGCTTACTGCGACCTGATTTTTCTC
TTGTGGCCCTTAAAACTATGAATATCAACAGTCATCCAATTTCTCACCTTCATCTTCTCCCTCAGTTGCTGTAAGTAC
CCTATCACTAAGGCCCTGTGATTTACCTTCCAGTTATGCGCTGCATCTATCCCTCTCTCTTCATCTTTCCCGGGGCCG
GCCTGTCTGTGCTGGCATTACCTGTTTTCTGAACCACAGTGATAGCTGCCTTGATCCATTTCTGGCATCTGCTCTTGC
CCCTCATCCAATCTGTTCTCCATATTGCAGTCAGTCACCTGTTTGAAAACAGAAAGTCCAACCTTATCACTCACCACACAC
CCTTGCCCTTAAACCAGTTAGCGGTTTTCCCATTTGTTCTTAAAGACTATTAACGTCATTTTTGTGTGATTGTCCAGGGGCT
CAATAATCTGAATCACACCTTGTCTCCAGCCTCCTTTCTGCCTTATCCTGAAGTATCCCTGCCTGTTTCACTCCCTCA
GCTTCTTGTACACCGACTTTCCACCCAGTGCCCTCAGGGCACTTTCTCATGCTGTTCTCTCTGCCAGGAACACATGCTTC
TGTCTTTCTCTCCCTTTTACCTAGTGAATCCCTCCTCATCCTTCCCATCTTTGTAAATTCACTTCAGTTTAGAAGACTT
CTCTGGACTGTTTATATTGTGAGAACTATCTTCTATATATGCTGCAGAAGTATACATACGCTGCATACCTTTCTTCACTGT
ACTTATCAGATATGAGTAAATGTATAATTTAATGTAAATGTGATTAAATGTAGTCTTTTTATTACTGAAATAATGT
CTATTTGCTCATCACTGCATCAGTAGTACCTAGCAACAATCTTCACACACAATTTGAATCCAATAAGCATCTTTGTTCTC
GGCAGCTCCTCGTTTTTTTAACTTAAGCCCTACCCTACCCTAGCACACAGAGAGTCTAAATAAGTATTTATTTAGTT
GAAGTGGCTGTTAATGGCTAGTGTTTAAATATATTCTTTGAAAAGACATATTTTCAAAAATTGCCTTGTGGCCAGCCC
AGTTTGACTCCCAATAAAAAATACAAGTGTGCCATTTTGTTCAGACACACATAAGGTTGCTATTTAGAAGGAGGGT
TTTTATTGATATATTAAGACTGCCCTGAACATATCAAGTTAATTTATTTCCCATTTTCACTTTTTTAGCCATCTGTTTGT
CTAAAGGAACAAAGATTTGGGTAGAAGTGGTAATAAATACTCAGATAAAAAATCTATGTAATAAAATTTCTATGTAATCT
TCAGCACTTACTATGAAAAAAATAAGTAGATTATGGCAGAATAAAAGTAAATATTTCTGCTTGATATTTAGAGTGT
TGTTTTGGCATCTGTGACTTGTGCTAATGACCTCGGGTTTAAAGTTTGGTTTTTATTGTCTGAAGATAGCTGGATTTGGG
AGAGTAAGTCAACAACCTTTTTTTTTTTTTTTAGCAAACTCTAAATGTCTGGATGATCTGATAGATGCAATTCACATTT
CGAGTCAAATGTTGAATATGTATTACAATTTAGGCTGTTCTTGAAGCTTTATTAATTTGAGCACCAATCTTCTGAAGC
TAATGGAGGTAAAATCATAGTCAAACGCCCTTTTAACTCAAAAGAACCATGCCCCCACTATTTCTCTTCTCAAACCTA
TTGCTTCTTTCAGGCTAGGATATTTGGGATATTAAGGGCTCTTTTAACTCAAAATAGCAAAACCATAGCCCTCATCTT
CTTATTTAGGAAGACGGTCTTTAACATTTAATTTCTGAGCACTTACCTTTTCCGTAAATGAAATTTCTGTTTCTCATTTGG
ATATTGGCAGAGAGCCAAGATAAGGTGAGCATTGAGCAGGATAAACTAGATGATTCCTTAATTCAGCAAAATATATTTTG
ATTCCAATTGTGTACCAGAAATTTCTTAGGTACTGGGAATTTACAGTGAACAAATAACATTTCTATCTCTCACAGAGC
TTACATCTTGAAGATAGGTAATAATAATATCTATCTATCTAATTTGAATCACTCTTCTCTCTCTCTCTCTGTCTT
TCTCTCTTTGCTCTCCCGCTTGGGTCTTTCAAAGACATTTCTGCAGGAGTACAGCTATGAGCTGTTTAGCAGTCAGTAC
AACCTCTGGAAGATGGGTGTACCTGCCCAATAAAGGGGATCTGAGAAGACCGTCAGTAGCATCTACTATAGAAGATAAA
TGCAGTATTCAGGCAGGAGATTATGATGGCTTGGACTAGGGTGGTAGCTGTGTTTACGGTGAGAAAGATAAGATCTGG
ATATATTTCTAAGGTAGATTTCAAGTTTGCTGCTTGATTGAGATCAGTTGCAAGGAAAAGGAAAGTCAAAAATGACT
ATATAAATTTCTGGTCTGAGAACTGTGCAATAGAGATACTGTTTACTGAAATGGAAGGAGAGATCAAGATTTTCAT
GTTAAATTTGGTACATTCATTCAGATATATCAGTGGAAAGATAGGCAGTTGGTTATGGTAGTCTTGAGTTCAGGTTGGT
TTTACAAATCTAATTTGGGTATTGATGATTTTAAACCTGAGGAGTTACCATAGATAAATAGGAAAAGCCACTCTAATGT
TTTGAAGTTGGAATTTCAAAAGGAAATGGAGCTTTTGAGAAGGAGCAGCTGGTGAGGCAGAAATACAACCTAGAGTGAG
GAAAGGCTTGAAGTCAATGAAGATAGTGTTTTACAAAGGAATGCATGATTAATTTGTGAATGCTGCTGATTACTTAAGT
GAGAACTGAGAATTGACAAATGAATTTAGCACTGAGAAGACCTTGGATGATCTTGAGAAGAGCTGTTTCAGTGGAGTAC
TATAAACAAAAACATAGGAGTACATTCAGGAAGAAATGGTGGGAGGGCAAGAACTGAATATCATGAGTTTGGAAAACTC
TTTTGAGGAGTTTTACTTTAAAGAATTTAGGCAGAGAAATAAGATATATAGTAGTTTAAAGCTTAAATTTGGACATATTTA
GGCAGGTTGCTATGATAATGGGAAGAATTCAGAGAGAAGGAGGAAATTAGTGATGCAACAGAGACAGTAATAAATCTGGAG
TGATATACTTTGAAGAGGAGAAAAGAGATGATATCAGGCACATAAATGGAGGATTTGATAAATGTGATGGGGGCTGCAGA
GAAAAATTTGTTTTCTGATTTGCTATTATTTTTTTCAAAGAAATAGGCTATCAACTGAGTGTGAGGATAGAGCAGAAGCT
GTTAAAAATTTAAGGAGAGTTGTGAAATAATCATCTGTAAGCAGGAGTGTGAATGAACCTAGGAAGATGTAGTAATATTT
CTGGACAGCCCTGAGAGCTGAAATATTGTAAGAAATAATCTGAGGAAGTTCTGAGTACTTAGACAGTTGAGGTTAGGGG
GAGCATTTTTATTAAAACAATCACAAAGAACATGGGAAAAACAGATACCAACTTGGCAATTGTCTAGTATTTAAATAAA
CTAATTTTGGAAAATTTAACTAAAAAGATGTTATATGCATTATGATGTTTTCAAATAGACTAGGGCCATCAGACCCAA
TAGTTTCTTTATATAAGACCCCATAGTTTAAATATATAATTAAGTGTTCAGTTCAAATTTTGATAAAATGATAAATATAT
TGTACCACCATGGGAATTTGAAAATGCGACCATTTGTACTGGGATATTATCATGTAATATTTTAAATTTTACCTCTTAAT
TATCAAAGTGAAAGATTTCCATGCAGTATTATTTGGTTGTGGGGTAATTGTTTAAATTTATTTGGAATTTTATAGTGCTT
TTGCTTAGCCACATTTTATTTTGTGGTCAAATTCAAATGCTGATCTAATGGCTTCAGAGTAAATGAGAAAGGTCAAAT
GGGACTGGAAAATTAGGGTTTTCTTCTGTCTATTAGGTATATTTATTTATAAAATAACTGGAAAAATCTCTCATGTATTTA
ACATCTGTTCTCTTCTTCCCTGGTCACTGCATATCAAGAAGACTTTGACATTTGAGTTTGTATACGGTTTGGCTCTGTGT
CCCCACCCAAATCTCATCTGAAATGTATCCCATAATTTCCAAATGTGTGGGAGGGACTCGGTGGGAGATAAATTTGA
ATCATGGGGTAAACTTTCCCCATACTGCTCTCATGGTAGTGAATAAGTGTCAAGAATCTGATGGT'TTTATCAGGGGT
TTCGTCTTTTGCATCTTCTCATTTTCTCTTGGCACTGACGTGTAAGAAGTACCTTTTGCCTCCTGCCATAATTTGTGAG
GCCTTCCAGCCATGTGGAAGTGAAGTCCAATTAACCACCTTTTTCTTCCAGTCTCGGGTATGCTTTTATAAGCAAT
GTGAAAATGGACTAATACAGTAAATTTGGTACCAATAGAGTGGAGTGTGATGAAAAGATACCTGAAATGTGGAAGCGAC

113/375

TTTGGAATTGCCCAACAGGCAGAGGTTGAAACAGTTTGGAGAGCTCAGAAGAAGACAGAATAATGTGGGAAAGTATGGA
 GCTTCCTAGAGACTTGTAAATGGCTTTGACCCAAAGCCTGCTAGCAATATGGACAATAAGATCCAAGCTGAGGTGCTC
 TCAGATGGAGATAAGGAACCTTGTGGGAACCTGTAGCAAAGGTGATTCTTATTATGTTTTAGCAAAGAGACTCACAGCAT
 TTTGCCATGCCCTAGAAAATTTGTGGAACCTTTGAACCTTGAGAGATGATTTAGGGTATCTGGTGGAAGAAATTTCTAAGCA
 GCAAAGTATTCAGAGGTGACTTGAGTGTGTTAAAGGCACTCAGTTTTATAAGAGAAGCAGAGCAGAAAAGTTTAAAA
 AATTTGTAGCCTGACAATGTGATAGAAAAGAAAACCTATTTTCTGAGGAGAAAATTGAAGCTGGCTGCAGAAAATTTGC
 ATAAGTAACGAGAGGCGGAATGTTAAGCCTTCAAGACGATGAGGAAAATGTCTCCAGAGTATCTCAGAGGTCTTCACAG
 CAGCCCCCTCCCATCACAGGCCTGGAAGCCTAGGAGAAAATGGTTTTGTGGGCCAGGCCAGGGTCCCCGTGCTGTGTGC
 AGTCTAGTGACCAGGTGCCCTGCATCCCAGCCACTCCAGCTGTGACTAAAAGGGGCCAAAGTACAGCTCGTGCTATGGC
 TTCAGAGGGCAGCAGCCCTAAGCCTTGGCATCTTCCATGTGGTGTTCAGCCTGCAGATGCACAGAAGTCAAGAATTGAA
 GTTCGGGAACCTCCGCCTATATTTCAGAAGATGTATGGAATGCCTGGATGCCCAGGCAGAAGTTTGTGTCAGGGGCAG
 GGCCCTCATGGAACCTCTGCTAGGGAAGTGTGGAAGGGAATGTGGGGTTGGAGCCTCCACACAGAGTCCCTACTGG
 GGCACCTGCCCTAGTGAGCTATGAGAAGAGGGCCACAGCCTTCAGACCCAGAATGGTAGATCCAATGACAGCTTGAAGC
 ATGTGCCCTGGAAGGCCACAGATACTCAACGCCAGCCCATGAAAGCAGCCAGTGGGAGGCTGCACCCTGCAAAACCAA
 GCAGCAGAGGTGCCCAAGACCATGGGAACCCACCTCTTGCATCAATGTGACCTGGATGTGAGACATGGAGTCAAAGGAG
 ATCATTTTGGGGCTCTAAATTTGACTGCCCTGCTGGATTTTGAGCTTGCATGGGCCCTGTAAACCACTTCGTTTTGGCC
 AATTTCTCCATTTGGAATGGCTGCATTTACCCACTACCTGTCTCAGATGAGACTTTTGGACTGTTGACTTTTGGGTAAATGCT
 GATTTTACGGGCTCATAGGTGGAAGAACTTGCCCTGTCTCAGATGAGACTTTTGGACTGTTGACTTTTGGGTAAATGCT
 GAAATGAGTTAAGACTTTTCAGGACTATTGGGAAGGCATGATTGGTTTTGAAATGTGAGGACGTGAGATTGGAGGGCC
 CAGGGGGGAATTATATGTTTAGCTCCGTGTCCCCACCCAAATCTCATCTTGAATTGTACTCCCATAAATCCACATGT
 TGTGGGAGGCAATTTGGTGGGAGATAAATTAGAATCATGGGGCAGTTTCTCCCACTGTTCTCGTGGTCTGTAATAAGTC
 TCACAAGATCTGATGGTTTTATCAGGGGTTTCCACTTTTGTATCTTCTCATTTTCTTGTCCACCACTTGTGAAGAAG
 TGCCTTTTGCCTCCTGCCATGATTGTGAGGCCTCCCGACACATGGAAGTGAAGTCCAATTAACCTCTTTTTCTTC
 CCAGTCTTGGGTATGTCTTTATCGCCACATGAAAACAGACTAATACAAGGTTATTCTATGAGTTAGAAATAATTCCTCT
 AAAAGTAACACTTGCTGAGAATTTCCCTACCTTTTCTGGGCTTTTAAAAATGCATCTTATTCTCATCCCCTAAAGTGG
 GTGTGTTAGTCAGGGTTCTCTAGAGGGACAAAACCTAATAGGAGATATATATATATATCTCTATATATCCTATATAT
 ATATAGTATTAACTCACATGATCACATGGTCCCAATAGGCCCTTCTGCAAGCTGAGGAACAAGGAGAGCCATTCCGAG
 TCCCCAAACTGAACTTGGAGTCCAATTTCAAGGGCAGGAAGCATCCAGCATGGGAGAAAGATGTAGAGTGGGAGTCTA
 GGCCAGTCTCATGTTTTACATTTCTTCTGCCTGCTTTATATTCTAGCTGTGCTGGTAGCTGATTAGATAGTGCCCACTC
 AGATTAAGGGTGGGTCTGCCTTTCCCGAGCCCACTGACTCAAAATGTTAATCTCCTTTGGCAACACCCCTCACAGACACC
 CAGGATCAATACTTTGCATCCTTCAATCTAATCAAGTTGACACTCAGTGTTAACTATCGCATGGGTGAAAGCCATTAC
 TAGGCAACCCCAACCGTTGCTGCAGGTTGATGCAGCAATGAGTAGGAAGATGTGGTGGGAAGATGTGGGAGTATAAACTT
 CGCCAGGCAGTAATATAGGTATATAATACATGAGCAGGGCTGCAATACCTCTCTTAGGAACCTGGACAGCTTTATGGGCCA
 AACCAACCTCAAAACCCAGCTGCCACCTGACACAGACTGTCCATGGGAGTGAAGTCTGACCTGTCAGATCACCCACTGT
 ATTATCCAGGGGAAGAGTTACTCTAGAGAATGCCCACTTAAAGGTATGTGAGTCTGACTCTGCAGATCACCCACTGT
 CTACACAGCTCTTGTCTGAAGAGCTGTCTTGCATTGTCAATACCTTGGTGCAACATATGTGGCTTCTGCCCCTTCT
 GCCAAGTGGACCTCTCACTTTGAGCACATGGTAAGCATCTCCATAGGTACACAAAGTTTGTAGCAACTAACTCCTAT
 CTGGAGTTACTCAGACCCACTACCTCTCCTGTTAGTGCATCTATGCTCTTCAAAAGTACAGTAAGCTCTGCTTCACTT
 GTCTTGAAAACATGAATTTGTTCTAATGCAATGGACATATTGGAGAAGAATTTGATGAACAGCTAAAAAAGCAATAGT
 ATAAATAATTTTCATGGCTCTACATGTAACCTCTGGAATGCATAACAATGCTTTTTTCCATAAGAAGATGTTTTTCTGT
 GCTTGTAGATTATCTTTTAGACCTGTAAAGAATGCTTGGAAATAATTGATGAAGTGCCAAGTCCACTAAGTTTCTGTT
 TTTAGCTTCTATCCTGAAGTTTCTCATATTCTTTACCTTTACATCTCTCAGTGTGAGCTCATATGAATCTGTGGCTTCA
 GGTCCCATGTATATACTGATGACACCCAAATCTCTTCTGAATGACCAAAGACCAAACCTTTCTGAGTCACAGATTTTAA
 TTTACATCTGAATGTACCCCTAGTATTTTAAATTTCTTAAATATAAAAGTTTAAATTTTCTCATACCCACTTATGTATA
 TGCATGTGTGAGTGTGAGTATGAGTGTGTGTACCACATATACTTACTATGTGTGTAGGCATTGTCTATATGTTTCAT
 ATCTATTAACTCATTAATCCCCAAACAGCCTTATGAGTTAAGTCTTCTCATTATGTCTTATAATAAATGAAGAACT
 GAAGCCAAGGGATTAAAGTAACTTATCCAAGGTCAATGAAGGAGCTGAGATTTAAATCCAGAAAATCTAATTCAGAGGA
 CAACCATTTTCCAAACATCATGCAATCCAACAAGGTGAAAGCCTGTAAAGGATTATTTCAATTCTTTATTTGAATCTCTG
 CTTCAGCAAGCACATTCAGTGGAGGAAAGATATCCAGCCTTTGGTTACAGAGAAGGCATGCTCTCAGAAGGCTCATATT
 TGGTTTACAGTTACTTGCTCATTGATTTTTGTGAGTTCCTGAAACTTACAGAACTTTCTTAGGTGTTGAGTCAAAATGT
 AAATATTATATGAATAGTGTCCATCATAGTTTTTATATGAACGTTAAACCAAGGCCTCTCAATCACAGGTGGAACATGT
 GAGCATAAGGTTAATATCATCAAGTAACTGGTGATAAGGCTAAATGATGGATGAAAGTCAGATTGTGGAATACCTTAA
 AGGGCAGACCAACAAGGTTTAAAGGACTTTATCTTGTGTTGGTAGTAATAATTTTTGTACCAGGAGTTTGCCATGAGC
 TTCAGACCATGTTTTCAGGAAGAATCAGTTGGGCCTGTGTGTGTAGTTCTCGGATAGTAGAGCATGCACAGACCTTGAGT
 GCACTCACTTTAGGGGTCTTACAGTCTGGTGTGTGGTTCTCCAACCTTTAGTGTGTATCAGAATCTCTTGGGGAAACAT
 GTTATAATATCCTGGGAGGGCTTCATACCAGGACTCCGTCTTCAGAGATTTTGTTCAGTGGAATGGATTAAAAAGGC
 AGTGAGCTGCATTTTCATAAACACCACTCTTGAAGATGATAATGCAGGTTGTTTGAGAAAACCTGATCTAGTGGCTGTG
 GAATTGATGTAAGTGTGAGGCAAAAATGGTCAAAAGTAGGATAGTTGGAAAAGTAAGAGGTGGAATTTCAATTCGAATG
 GCCATTTGAGCCCATGTTTTATTTATTTATTTATTTGTCAGATTCTCAGTAAACACACACACACACACACACACACA
 CACACACAACCTACATCCATCCTGAAAAACAGGAAAGGTTTCCATGCAGAGGTCAAAAACCTGTGACGTATATCTGCCAT

115/375

AGACACAAGAGAGATAAGAGCTGATTGTTATGGCAAGGTCTCTGGCTAGGCAGAAGTGAATGGGTCGAAGAGAACAGAT
TTAGGAACTGACCTTCTATCAGGAGAACATATTTCTTCCAATGTCATGGGGGAACATAGAGACTCAGGGGGTCTGTAA
CCATGTATGGCCCCAAAGGACTGGACACATGGTGAGCAACTATGGTAGGATGAAGGGAGGCATGTTAGGAAATGTCCA
GCTCCGAGGCCTCCACGTGACCCCTAGGTGAGAAGCTGCCATGATTCCCTTAATAGGGAGCAACACAAAGACTAAAATGA
TGGCAATGTAAGGGTTAAGGAAAAGGTGATTTTAAAGCTTCTTGAGGGTAAAGTCCATCTGTGTTCACTTTTGTGATC
TTTGTTCATCCTTCTCAATCTTGCATATTGTTGATCTCAAATAAGTTTATGGTATTTATTATGTTCAAAAAAGTTACA
GTTTCTTAAGTTTCTTCTATTTTCTTAAGGAAGGAGGTGATAGGATGGAGGGGGCATGATGCCAATTGACTCTCCTGC
TTAGGACTTGCCCTTCTTTTAAATGGTGAACACAGAGTTACATTATTTAATGCATAATGTGAAAGTGACAGAGGCCCTG
ATTATTTGGAGTATAAAATTTTATATTATTATGGAGGCTAAAAAGTACATGACTGGACTTTTTTCATACAATAATTCAAAG
TAAGCCCATGGAACATCCTCTTCAAATGAAGTTGACGTACGTCTCATCTCCCTGGATTGGATGCCCAACCCTCACCTT
GAAAGCAGCTTGTGGATAACTCAGGGCAAACAGAAGCAGAACCCTCATGAACCTTCTCTCTTCTGGAAATTTTGGATGG
CGTTACAGAATGAGGCAAAAATAAAGTTACCTTCTTCTCTTCTTCTGGATTAAAGATCCCAGAGCCATTCTCCTCTGTG
TTCTCTACTTGGACCTTGTATAGTGTAGGATATAGCCAGGAAGTAAAGGATCCTCGGTTGACTCATAGTCGGCAGAGGGT
GTTATGGCCCTCCTGAGAGAGTGACCTTGAGGAGAGAATCTATTAGATGGTTTTATGACAAGACCAAAGTAACATTTC
TTAGTTACCTCTTAGCCAGAGTTTAGTGTTAAGTTTGGCCCTGAAGTATAGTTTTCAAATAATAGATCAGGCATATGC
TATTTTGACTAAGTAGAATACCCAATAAAATAAGTCAATTCAGTTGTGACTGAAAGTTCGGATGGTCTTATGGAATCA
AGGTGACCAATAACATGATACATAAACCAAGAAGTGAGTCATGTTGTTTATCATACTGTTTTTATAAATTTTGTATAATA
CAACCCCATACGACCCACACAGTTCAAACAGTAGTGGTTACTCACTCCATGGAGAAGATGTCAAAGTAAAGGAAT
AATACATTTGGTTATGATGTCGAAATTGGGCACATAAGCATTAGTTTTGTTGGTGAATAATGTTCAGAATGAAAATTG
ACACACTCTTTGGATTATCAAGCTTTTAAAAAGTATAATTAATCAGTTTTTAAATGAAATATACAGAAATATAATGGC
AGCTCTTCTATTAGTGAAGTTTCTGAGGCAGCTGGATTGATTGAAGGCTTTACCTGGTTTCATTTGGATTCTACTTGTA
AAGCATGAAGAAACCACTTTAGGGTCAGGAATTTTCCATAAGTCAGGTTTTTTTTTAAAGCCATATAATCGATGCAGA
TATCAAAACATTAAGATGAGATAAAAAATAGCTTTTAAATCAAGTAAGTTAAATTAATAACTGTTAAGGTTCAAATCATG
AATTAAATCTAGATGTTTGGCAAAGACAAAATCTTTATAAAAGGATAAAATAGTCTGGGAATAAAGTATTTGTCATTC
CCATATCAAATGAGAACAAAACATAAATTTTATTAACCTTTAGGTTTTTATTGTATTAAATAACATCATTTTTATTTAC
TTTATCACAAGGTATATTTTTCTTTATTTATATGTCTTTGTAGAAAACCTAGTAACATTCCTGTGTGACTGAATAGATTA
ATCACAGATATACCCATCTGGAAAAATGCATGCTACTATAAGAGATGAGTGAAATATATAAAATTTATATTTTAATCT
TATGCTAATTAGTTAAATGGGGGAAGATGTATGTCCAGAATATTTGCTCTTAATAGGACATCGTAGTGAAAACCATTC
AATGATGATGACTAATAAATGTGTATCTTCAACATTGTATAATGCCAGGAATATTTCCAAATAAAGAATTTCTAGGTA
AGATGTTTTAACAATATATGATACTTTTGTCTTCTGGGTGAATGTTCAAATAATTTCTGGGGCATTTGTGCTCAGT
ACTTATAGTATCATTAATATTATTGTTGACATATAATAAACAATAATCCTGGTCAGATAGGTTTTTCTTTTTT
AGCTGATTATAATCATTTGATACATACCTCAAAACATTTGTCAATTTCTTGTGTTTTGAACATTGAAAATCCTCTCCTCTA
ATCAGGTTAATTAGCGTATACATCACCTCAAAACATTTGTCAATTTCTTGTGTTTTGAACATTGAAAATCCTCTCCTCTA
GTTTTTGAATAACACAATGGATTATAGCTAACCATGTTTACCCAACAGAGCTACAGAACACCAGAACTCATTCCTCTC
ATCTAGCTATAATTTTATATCTGTTAACCAACTCCTTCCCATCCTCCTCTTCCCCCATCCTTCCCAATCTCTAATACCC
ACAATCTACTTTACTACCATGAGCTGAATTTTTTATTTTAGCTCCCTCTTATGAGTGAGAATGTGCGGTATTTATCTT
TCTGTGCCTGACTTATTTCACTTAACATAATATCCTCCAGGTTTCATCCACATTGCTGAGAATGACAGGATTTCAATATC
TTTTTGTGGCTGAATAGTATTTTATTGTGTATATACCACATTTTCTTATCTATTTGTCTGTTGGTAGACATTAAGG
TTGATTCCATATCTTAGCTGTTATAAGTAGTGCCGCAATAAACATGATGGTAGAGGTATCCCTCTGATATATTGGTTTC
CTTTCCTTTGGATAGATACCCAGTAATGGGATTGCTACATCATATGTTAGTTCTATTTTTAGTTTTTAAAGAAATTTCC
AGATTGTTTTCCATAATGGCTATACTAATTTACATTTGCACCAACAATGTATAAAAGTTGCCTTTTCTCTGCATCTTTG
CCATCATTTGTTATTTTTTCTTTTTTATAATGGCCATTCTAACTGGGGTGAGATAATATCTCATTTGTGGTTTTGATGAT
TAGTGATGTTTCAAGATTTTCTCATATACCTGTTGGCCATTGCAAGTCTTTTGAAGTGTCTATTAGATATTTGCC
CACTTTTGAATCACCTTATTTGTTTTTCTGTTGAATGTTTGTGAGTTCTTGTATATTCTGGATATTAGTCCATTGTC
AGGTGAATAGTTTGCAAATATTTTCTCCCATCTACAGGTTGTCTCTTCACTGTTGATTGTTTTCTTTCTGTACAG
AACTTTTTTAGTTTAAATATAGTCCCATTGACTATTTTCTGTTTTTGTGACTGTGCTCTGAAGTCTTAGCCAAATAGT
TTTTATTTCTTCAAATAGCTTTGGCATTTGAGTACCATTTCGCTCATTCAGAAAAGCAACCACCAACCAAAAGAAAT
AGGTTATTAATTTTTTTTAAATATTATTATACATTTAAGTTTATAGGGTACATGTGCACAATGTGCAGGTTAGTTACATA
TGTATTTTATGTTGCCATGTGTTGCTGACCCCACTAACTCATCATTTAGCATTAGGTATATCTCCTAATGCTATCCCT
CCCCCGTCCCTCACCTCAACAGTCCCCAGAGTGTGATGTTCCCTTCTGTGTCCATGTGTTCTCATTTGTTCAAGTT
CCCACCTATGAGTGAGAATATGCGGTGTTTGGTTTTTGTCTTGGGATAGTTTACTGAGAATGATGATTTCCAATTTT
ATCCTTGTCCCTACAAAGGACGTGAACCTCATCATTTTTTATGTCTGCTTATTATTCCATGGTGTATATGTGCCACATTT
TCTTAATCCAGTCTATCATTGTTGGACATTTGGGTTGGTTCCAAGTCTTTGCTATTTTGAATAGTGCCACAATAACAT
ACGTGTGCATGTGTCTTTATAGCAGCATGATTTATAGTCTTTGGGTATATACCCAGTAATGGGATGGCTGGGTCAAAT
GGTATTTCTAGTTCTAGATCCCTGAGGAATCGCCACACTGACTTCCACAATGGTTGAAGTGTACAGTCCCACCAAC
AGTGTAAAAGTGTTCCTATTTCTCCACATCCTCTCCAGCACCTGTGTTTCTGACTTTTAAATGATTGCCCTTCTAAC
TGGTGTGAGATGGTATCTCATTTGTGTTTTGATTTGCATTCCTCTGATGGCCAGTGATGGTGAGCATTTTTTTCATGTGT
TTTTTGGCTGCATAAATGTCTTCTTTTGAAGTGTCTGTTTCATGGCCTTCGCCCCTTTTTGATGGGGTTGTTTGT
TTTTCTTGTAAATTTGTTTGAAGTTTATTGTAGATTCTGGATATTAGCCCTTTCTCAGATGAGTAGGTTGTGAAAATTTT
CTCCCATGTTGTAGGTTGCCTGTTCACTCTGATGGTAGTTTCTTTTGTGTGCAGAAGCTCTTTAGTTTAAATTAGATCC

116/375

TATTTGTCAATTTTGGCTTTGGTTGCCATTGCTTTTGTATGGTTTGTAGACATGAAGTCCTTGCCCATGCCTATGTCCTGAA
TGGTAATGCCTAGGTTTCTTCTAGGGTTTATGGTTTGTAGGTCTAACATTTAAGTCTTTAATCCATCTTGAATTGAT
TTTTGTATAAGGTGTAAGGAAGGGATCCAGTTTCAGCTTTCTACATAGGGCTAGCCAGTTTTCCAGCACCATTATTA
AATAGGGAATCGTTTCCCCATTGCTTGTCTTCTCAGGTTTGTCAAAGATCAGATAGTTGTAGATATGTGGCATTATTT
CTGAGGGCTCTGTTCTGTTCCATTGATCTATATCTCTGTTTGGTACCAGTACCATGCTGTTTTGGTTACTGTAGCCTT
GTAGTATAGTTTGAAGTCAGGTAGCGTGATGCCCTCCAGCTTGTCTTTTGGCTTAGGATTCAATTTGGCAACGCGAGCT
CTTTTTTGGTTCCATATGAACTTTACAGTAGTTTTCCTCAATTCGTGAAGAAAGTCATTGGTAGCTTGATGGGGATGG
CATTGAATCTTTAAATTACCTTGGGCAGTATGGCCATTTTCACGATATTGATTCCTCCGACCCATGAACATGGAATGTT
CTTCCATTTGTTTGTATCCTCTTTTATTTCCCTTGAGCAGTGGTTTGTAGTTCTCCTTGAAGAGGTCTTTCACATCCCTT
GTAAGTTGGATTCTTAGGTATTTTATCTCTTTGAAGCAATTGTGAATGGGAGTTCACTCATGATTTGGCTCTCTGTTT
GTCGTTTGTGCTGTATAAGAATGCTTGTGATTTTGTACATTGATTTTGTATCCTGAGACTTTGCTGAAGTTGCTTAT
CAGCTTAAGGAGATTTTGGGCTGAGACGATGGGGTTTCTAGATATACAATCATGTCGTCGCAACAGGGACAATTTG
ACTTCTCTTTTCTAACTGAATACCTTTTGTTCCTCTCCTGCTTAATTGCCCTGGTCAGAACTTCCAACACTATGT
TGACTAGGAGTGGTGAGAGAAGGCATCCCTGTCTTGTGCCAGTTTTCAAACGGAATGATTCTAGTTTTTGGCCATTGAG
TATGATATTGGCTGTGGGTTTGTATACATAGGTCTTCTTATTTTGTAGATACGTCCCATCAATACCTAATTTATTGAGA
TTTTTTAGCATGAAGGGCTGTTGAATTTTGTCAAAGGCCCTTTTCTGCATCTATTGAGATAATCATGTGGTTTTTGTCTT
CGGTTCTGTTTATATGCTTGATTACATTTATTGATTGTGTATATTGAACCAGCCTTGCATCCAGGGATGAAGCCCAC
TTGATCATGGTGGATAAACTTTTGTATGTGCTGCTGGATTCACTTTGCCAGTATTTTATTGAGGATTTTGCATCAATG
TTCATCAAGGATATTGGTCTAAATTTCTCTTTTGGTTGTGTCTCTGCCCTGGCTTTGGTATCAGGATGATGCTGGCCT
CATCAAATGAGTTAGGGAGGATTCCCTCTTTTCTATTGATTGGAATAGTTTCAGAAGGAATGGTAGCAGCTCCTCCTT
GTACCTCTGGTAGAATTCCGCTGTGAATCCATCTGGTCTGGACTCTTTTGGTTGGTAAGCTATTGATTATTGCCACA
ATTTTCAGATCCTGTTATTGGTCTATTTCAGAGATTCAACTTCTTCCCGTTTGTAGTCTTGGGAGAGTGTGTGTGTCAGGA
ATTTATCCATTTCTTCTAGATTTTCTAGTTTATTTGCGTAGAGGTTTTTGTAGTATTCTCTAATGGTAGTTTGTATTTC
TGTGGGATCATTGGTGATATTCCCTTTATCATTTTATTGTCATCTATTGATTCTTCTCTCTTTTTTTCTTTATTAGT
CTTGCTAGCGGTCTATCAATTTTGTGATCTTTTCAAAAACAGCCTCCTGGATTCAATTTTGAAGGGTTTTTTG
TGTCTCTATTTCTTTCAGTTCTCCTCTGATTTTAGTTATTTCTTGCCTTCTGCTAGCTTTTGAATGTGTTTGTCTTGC
TTTTCTAGTTCTTTAATTGTGATGTTAGGGTGTCAATTTGGATCTTTCCTGCTTCTCTTGTGGGCATTTAGTGCTA
TAAATTTCCCTCTACACACTGCTTTGAATGTGTCCAGAGATTCTGGTATGTTGTGCTTTTGTCTCGTTGGTTTCAA
GAATATCTTTATTTCTGCCTTCATTTCTGTTATGTACCCAGTAGTCACTCAGGAGCAGGTTGTTCACTTTCCATGTAGTT
GAGTGGTTTTGAATGAGTTTCTTAATCCTGAGTTCCAGTTTGTATGCACTGTGGTCTGAGAGACAGTTTGTGTTATAATTT
CTGTTCTTTTACATTTGCTGAGGAGAGCTTTACTTCCAACATATGTGGTCAATTTTGGAAATAGGTGTGGTGTGGTGCTGA
AAAAATGTATATTCTGTTGATTTGGGGTGGAGAGTTCTGTATATGTCTATTAGGTCTGCTTGGTGCAAAGGTGAGTTC
AATTCCTGGGTATCCTTGTAACTTTCTGTCTCGTTGATCTGTCTAATGTTGACAGTGGGGTGTAAAGTCTCCCATTA
TTATTGTGTGGGAGTCTAAGTCTCTTGTAGGTCACTCAGGACTTGCTTTATGAATCTGGGTGCTCCTGTATTGGGTGC
ATATATATTTAGTATAGTTAGTCTTCTTGTGTAATGATCCCTTTACCATTATGTAATGCCCTTCTTTGTCTCTTTTG
ATCTTTGTGGTTTAAAGTCTGTTTATCAGAGACTAGGATGCAACCCCTGCCTTTTTTGTCTTTCCATTTGCTTGGT
AGATCTTCTCCATCCTTTTATTTTGTAGCCTATGTGTCTCTGCACTGAGATGGGTTTCTGAATACAGCACACTGA
TGGGTCTTGACCCTTTATCCAATTTGCCAGTCTGTGTCTTTAATGGAGCATTTACTCTATTTACATTTAAAGTTAAT
ATTGTTATGTGTGAAGTTGATCCTGTCAATTATGATGTCAGCTGGTTATTTTGTCTATTAGTTGATGCGGTCTCTTCTTA
GCATCGATGGTCTTTACAATTTGGCATGTTTTTGCAGTGGTTGGTACTGGTTGTTTCCCTTTCCATATTTAGTGCTTCTT
CTGGAGCTCTTTTAGGCCTGGTGGTGACAAAATCTCTCAGCATTTGCTTGTCTGTAAAGGATTTTATTTCTCTTCACT
TATGAAGCTTAGTTTGGCTGGATATGAAATTTCTGGGTTGAAAATTTCTTTCTTTAAGAATGTTGAATATTGGCCCCAT
TATCTTCTGGCTTGTAGAGTTTCTGCCAAGAGATCTGCTGTAGTCTGATGGGCTTCCCTTTGTAGGTAACCCAACCTT
TCTCTCTGGCTGCCCTTAACATTTTCTCTTCACTTTGGTGAATCTGTCAATTTATGCGTCTTGGAGGTGTGCT
TCTTGAGGATATCTTGTGGCGTTCTCTGTGTTTCTGTATCTGAATGTTGGCCTGCCTTGCTAGATTGGGGAAGTTT
TCCTGGATAAATCCTGCAGAGTGTTTTCCAACCTTGGTTCCATTTCCCCATCACTTTGAGGTACACCAATCCGACATA
GATTTGGTCTTTTACATAGTCCCATATTTCTTGGAGGCTTTGTTGCTTCTTTTATTTCTTTTCTCTAAACTTCCC
TTCTCGCTTCAATTTCAATTCATTTCACTTCCATCACTGATACCTTTCTTCCAGTTGATCGCATTTGGCTCCTGAGGCTT
CTGCATTCTTACGTAGTTCTCAAGCCTTGGCTTTCAGCTCCATCAGCTCCTTTAAGGACTTCTCTGTATTGGTTATTC
TAGCTATACGTTCTGTCTAAATTTTTTCAAAGTTTCAACTTCTTGTCTTGGTTTGAATTTTCTCTGAAGCTCGGA
GTAGTTTGAATGTCTGAAGCCTTCTTCTCTCAACTCGTCAAAGTCATTCTTCTGTCAGCTTTGTTCCATTGCTGGTGAG
GAACTGCGTTCTTTGGAGGAGGAGAGGGGCTCTGCTGTTTGAAGTTTCCAGTTTTCTGCTCTGATTTTCCCATCTT
TGTGGTTTTATCTACTTTTGTATCTTGTATGATGGTGTACAGATGGGTTTGGGTGTGGATGTCCTTTCTGTTTGT
AGTTTTCTTCTAAGAGACAGGACCTCAGCTGCAGGTCTGTTGGAGTTTGTAGAGGTCCACTCCAGACCCTGTTTGC
CTGGGTATCAGTAGCGGTGTCTGCAGAACAGCGGATTTTCTGTAACCGCAAATGATGCTGTCTGATGGTTCTCTGGAA
GTTTTGTCTCAGAGGAGTACTTGGCCGTGTGTGGTGTCACTGACCTTACTGGTGGGTGCCCTCCAGTTAGGCTGCTC
GGGGGTGAGGGTCAAGGACCTTGTAGGAGGCACTCTGCCCATTTCTCAGATCTCCAGCTGCATGCTGGGAGAACCAC
TGCTCTCTTCAAAGCTGTGAGCAGGGACATTTAAGTCTGCAGAGGTCACTGCTGTCTTTTGTGTTGTCTGTGCCCTGC
CCCCAGAGGTGGAGCCTACAGAGGCAGGCAGGCTCCTTGAGCTGTGGTGGGCTCCACCCAGTTTGTAGCTTCTGCGCTG
CTTTGTTTACGTAAGCAAGCCTGGGCAATGGTGGGCGCTCTCCCCAGCCTCGCTGCCACCTTGGCGTTTGATCTCAG

117/375

[illegible]

118/375

AGAAGTTTGTACTTTGTTTATGATCTGAGTTGCAAATACTTTTATTCCTTCCCTTGACATTTATCATTTGCCTTAACCTTA
TGGTGAATTTTTTACCATGCAAATGTTTTTGGATTTTCATGTTGTTTCAGTATGTCAATATATTTTATATTCATTACATTTCA
TTAGTGGCTAAAACCTCCCAAATGTTGGTAGGAATATGGATGTCTAGATTAGTGAGGCTCAAATGCTCCAGGCAAGATC
AACGCAAAAAATACTTTTCTAGACACATTAATAATCAAATTTGTCAAAATCAAAGACAAAGTGAGAATTTCTGAAAGCAGC
AAGAGAAAACTACTCATCATGGAAGGGTACTCACAAAGGCTACAAGCAGATTTCTCAGCAGAAACCTTGCTGGGCA
GGAGGGAGTGGAATGATGTATTTCGGAGTACTAAAAGAAAAACAAACTGCCACATAAGAATAATGAGTCTGTAAAAGCT
GTACTTTAGAAATGAAGAGACATAAAATCATTCCAGAGAAAAGAAAGCTAAGAGAGTTTATTTCCACTAGACCTGCCT
TAAGAGAAATGCCAAAGGGAGTTCTTCAAGTTGAAATGAAAGGACCCGAAGTAACATCATGAAAACACAGGAAATCCCA
TAGCTAACATCATACTCATGTTGTAAAGCCAAAAGCTTTTCCATTAAGATCAGCAAGAAGACAAAGGAGTTTCACTCTCA
CCACTTCTATTCAACATAGTACTGGGAGTCTAGCCAGGGCCACTAGGCAAGAAATGGAAGTAAAAAAATATCCAAATTTG
TAAAGGAAGAAGTTAAATTTGTCTCTATTTCGATACAGGCATGGTTTATAGGAATCTCTAAAACTTTCATCAAAAAAC
TTAAATTAATAAATTAGCAACGTTGCAGGATACAAAATTAACATACAAAATCCAGTTGTCATTTCTGTACATTAACAA
CAAACATTTTGAGAAAGAAATTACAAAGACAGTCCGTTTACAATAGCATGAAAAATAATAAAATACAGAAGAATAAATAC
AACAGRGATGTGAAAGATCTGTACACTGAAAACTATAAGGCATTGATGAAAGAAATTTAAAAATACACGAATGAAAC
ATATTTTATGTCTATGTATTAGAAGAATTAATATTGTTAATCATGCCCTTACTGTCCATGTAATATACAGATTCAACCCC
TATCAAAATTTCCAATTGCATTTTTATATAAAAAATGTGTGGGTACATTATAATTTCTATTCTAGCTATTTGAAATATATA
ATAAATTATTGTTAACTATAGTTTTCTACTGTCTATCTAATGCTAGAACTTATTCCTTCTATTTAACCATATTTCTG
TATCTATTAACCAACTTCCAGGCTGTGTGTGACAGTTTTTCTAAGAGTTTTTCCAAGGCAAAGAGTAAGTGGAAGTCA
ATCTTAAATCACTGTGTCTGGCCGTGACCCGTGATAAAAGATTTAATGGAAATTTTCAAGTTTAGATGAGGGTAACAGAC
ATTCATCAGATACTGGGTGCTGGAGATAGATTAGAGCTAAGTAAGAAATCCATTTTTTGGAGTTAAGTAATCTCACTT
CACACCCAGTGACACTGCAACTGTTGATTAAAGAGTTTTCCAGTCTCTTTTTATCCCCGTTAGCCTACAGGAGCAGGTAA
ATATCTAGTTCTCTTCTGGGTCTGAAGATTCTGTAAACTTAAAAGGAGAGATCCTTTCTGATTGTATATTTATGGATTT
TCTAATGTCCATCACAGCACCGGATTTAACTCTCACACACATGCACACACACACAGGATATATTGAATGAGTAAATAAA
TAACAGACAGGAGAGTTGTTACTAACTGATCTCTAATATTACCTTATTGTTCTAATAACTGTGGATTTGATATAACTTT
GGGAGCAAGCAAGGTATCAGTCTTAAAGTATAGACAAATTTACTATGTCACTCAGATACTCAAAATAGAGAATATCTTA
TGCCCAAATGGCAAGGCTGAATTGAYCCAAGTGATTAAGTCACTCTTAAACTGTATAACCTTAATACCTTTTATTA
AGAATAAGTTCAGAAAAACAGTTTACAATTTCTTTTACTTAAATTTGATATATATATATATGTGCAGTTTTTCAGATTGTGAA
TGGGATTTGAGATCAGAAAGGCAGGGCTTCACTACTGCTATTTCTCCAAGTTGCTCTCTATTTTGTCTTTTAGCAAAAGACA
ATCTTTCTCTTCTTACTTTTATTTGTTTAAAC
ACAACCTTCATAGCATCCAATTGAGCAGTATCTAGGTACACGGCCAATGCAAAGCACTCATTTTCTTATTTCTCCTTAC
ATGTTTTTTCATTCTATTTTCCATCTTTGCCATGGACAAAGACTTCATTCCCTAGCTGTGGCTTTAGAATAACAGTATGA
CTAGATCATATTCTATTTTAGCTTAGCACTTACCTCCCATTTAGTTGAAATGAATATCAACAAGAATTCACACTTCTA
AATGCTTGAAAGCACAATGTCCATCCAAGATCCAAGTGACTGAAATAATAAGAGCCTTGTATATGAAGAAATACCCAT
TTTCATGATGTTTTCTGAGGCATTAAGTGTACTCTGAAAAGAAAGAGAGTGTGGTAAGACTTGGGTATGAGATAAA
ACAATTAGATATTTGCTTATAAACTGGAATGACCTTGTAAATGGCCCAGGAGCAATGTAATTAAATACCATAAAAGCTC
AGAATTCATTGTGCCCCCTGGAAACATCATAATTGCCCTCAGTCATTAGCTTTTCAAGGTTTTCAGCTTTAAACCAGGATA
TTTCTAGTCTCATCAAACTATACATTAGCATTCAGTGACTTGTAAAGAGTAACTTCCCTTCTAGATAGTCTGTGTGCT
TATGAAGTACATCCAAATGAACATATGACATGAGGTGGAGTACAACCTTAAAGTTGCCCTTCTTTCATCCTATATATTTT
GTTTATTCTTAATGTATCGTGAACTTCAGTAGAGAGCAACAAAGTTGTCTTTATAATTTGAAGTTTGTCTTCTCTTTT
TGAAAGAAAACGCATAATTTGGAGATTCCATCTGTGAAAAAACTTAAATTAACAATGTTAATTTTAAATTTCTATTA
TGTATAAGGTGTAAGGAAGGGGTCCAGTTTCAGTTTTCTGCATATGGCTAGCCAGTTTTCCCAACACCATTATTAAT
AGGGAATCCTTTCCCTATTGCTTGTGTTTGTGTCAGTTTTGTCAAAGATCAGATGGTTGTAGAGTGTGGAGTATTTCTGA
GGCTTCTATTCTTTCCATTTGTTTCAAAAAACCTTAGAAGAAAACTAGAAAAATACCATTTCAGGACCAAGCATGGGCA
AAGGCTTCATACTAAAACACCAAAAGCAATGGCAACAAAGCCAAAATTTGACAAATGGGATCTAATTAACATAAGAG
CTTCTGCAACGGCAAAAGAAAGTATCATCAGAGTGAACAGGCAGCCTACAGAATGGGAGAAAAATTTTGAATCTATCCA
TCTGACAAAGGGCTAATATCCAGAATCTATAAAGAACTTAAACAAATTTACAAGAGAAAAACAAAGAACCCCATTA
AAGAGGGTGAAGGACATAAACAGACACTTCTCAAAGAAAGGCATTTATGTGGCCAAAAATATATAAAAAAAGCTCAT
CATCACTGGCCATCAGAGAAATGCAAATCAAACCACAATGAGATACCATCTCACGCCAGTTAGAATGGCAGTCATTAA
AAAGTCAGGAAACAACCTGATGCTGGAGAGGATGTGGAGAAATAGGAATGCTTTTACACTGTTGGTGGGAGTGTAATCA
GTTCAACCATTGAACCTTGTAGATAGACAACCTGTAGATAGACAGATTCCATTGTGGAAGACAGTGTGGTGATTCTCAA
AGATCTCAAACCAGAAATACCATTGACCCAGCAATCTCATTACTGGGTATATATCCAAAGGATTATAAACAATTCTCC
TATAAGACACATGCATATGTCTGTTTACTGCGGCACTTTTTCACAATAGCAAAGACTTGAACCAACCCAAAAGTCCAT
CAATGATAGACTGGATAACAAAAATGTGGCACATATACCCATAGAATACTATGCATCCATAAAAAAGGATGAGCTCTT
GTCTTTTGCAGGGACATCGATGAAGCTAGAAACCATCATTTCTCAGCAAACCTAACACAAGAACAGAAAACCAACACCAC
ATGTTCTCACTCATAGGTGGGAGCTGAACAAAGAGAACACAGGGACATGGGGAGTGGAACATCACACACTGGGGCCTGT
TAGAGGGTGAGGGGGCTGGAGGAAGGATAACATTAGGAGAAATACCTAACGTAGGTGATGTGTTGATAGGTGCAGCAAA
CCACCATGGGCAGTGTATACCTATGTAACAAACCTGCACGTTCTGCACATGTATCCAGAACCTTAAAGTATAATAAGTA
AGTAAATAAATAAGTAAAAAGAAATATGTTAAAAAATTATATTATGTAGATATTTTGTATTCTTGCTTCATGCCAAGT
GCTTTCATAAATGCTAGACTTCTATTTGTACATTTTGTCTTTCATGAGGGTGAAGACAAATAAAGAGTGATCATTCAAAA
ATATTAATGTACGGAAAGTAAAGTAACTGTAGGGCTTCCATAACAAAGTACAACAAATTTGAATGGCTTAAACAAGAG

119/375

AAATGTATGTATTGTCTCACAGTTCTGGAGGCTAGGAGTCTCAAATCAAGGTGCCAGTAGCGTTGATTCCCTTTTGAGTA
 AGCTGAGAGAAAGATCTGTCCCTGGCCTTTCTTCTTGGCCTGTAGATAGACAACTTCCCTTCCCTGTATGTCTCTTCACA
 TTGTCTTCCATCTGTGCACCTCTCTGTGTTCAAATACCCTCCAACCTAAAAAAGCA
 TGTCACCTCACATTGGGTTAGGGCTACCCTAATGATTTTCATCTTAACTTGATTACCTCTGTAAAGACTTTATCTCCAAA
 CCAATCACATTCTAAAGTACTGGGGTGGGTGAGGATTTCAATATATGAATTCTGGGGGAGACCCAAAGCAATCCATAA
 AAGTAGCCATTTAAATAGAAGTATTTTAGTCTTTTAACTTAAAGTCTCTCTACARTGTTAAACCATGCCATCTTAATG
 TGTGTTATTTAGAATAATCTAAAAATTATATATTTTCATTAAACATTTAGGTTACCTTCAACTTTGTTTGTATGTTTT
 GTAAGCTGCCATAAGTGACTTTAATCACTCACTGTATACCCTGACAGATCATTCTCATGAATTCAGTGATGTGCAC
 TTTGAGACTCAGGAAAGAGGGAACTTGGCCTTACTAAATCATATAGTTAGTATGTGGCAGAGCTGATTTCAACTCT
 ACATCTTGTCTGCCCTCAAAGTTAGTGATATATGCATGGTCAATATTTTAAATACTCATTTAGTGCTTGCCTTTTT
 AATAAATGCTGATTTTCTGATTATAAGTGTAACAGGTGATCACTGAAGAAAGTTAGGAAAAAAGCTCAAAACCTTATT
 CAGATTAATATTAATAATCTACATAATTTACCATTACCATGATAATTTGTTGGTATATTTATCTTACAGAAATCGTTTATA
 AACATTTTTATTATTCAATTTATATATTTATATCTGCAGAACTACATATGTAGTTTTACTTACCACCAAACTTGTGTC
 AAAAAACATTTTACATTTGCCAGTTAAAAATCACCATTAACTCTTAGTGGAGAATTTATTTTTTAAATTTATTTAAATA
 AGAATATTTTCAATTTTGCATTTTCTAGAGAGAGCATGGCATAAGCCTTGTAAAGTTACTCCTGAAATTTAATTTTCT
 TTTCTTATTTCTACTCTCTAGTCTTAAGAGATGAGTGGTTCAAGACAGAGTGGGGTAAGGCAACAGTCAGCACTTTG
 TCTTGTCTCCACTCTCTGGTTTCATCTCTGAAGCCTGATTTCTCTACCCAGGCATGAAGATACTTGAATAAGTAGCCTTT
 TCCATCCTTTTGCCTGTATATGAAACTGGTATATCTCTTGAGAGAAGAGCCTCAAAAAATACTGAGATAGGAACAA
 GTGGAAAGCAGAGATAGTCTCTTCTTTTAAATCACCCTCCTTTGGTCACTCCTGAATATAAAAAAGAGGACCCAGA
 ACAACATGGTGTCCACGGCAACCATATCTAGGTATTGCAGAAATTTAGAGAACCCATGAAATCCTTTCAAAGGATAAGC
 AGGGGATCTAAATCGTGTGATGTATAGCACCCAGCACAGAGCTGAGGGCAGAATATGTGCTTCATGCATCTTTTTTG
 TTTGATGGCAATATCACTTCAAGGCTTCTTCAGAAAGATTCCATACCTACCTCTCCTTCTCACTTCTTTATAATCTGTA
 ATTTACACACTTACCTCACAACCTTTTCTGGGACACATTCATCTATCAGATATGTAACCACTGTAAAGCTGTTGGTTTG
 ATCTGCAAGTTTGGTGTGGTAAGACTGGAATCGTACAAATGATATGCTTGGATCAGGTAGTCCCTCGTGGTGAGTCA
 TGTCTAGGCTCACCCGATGCAGTCCAGTCATGCTTCCCTATGACTTAGTTGTTGTATTGTCCCCAGAGTCAAGAGT
 GTCCCAAGTCTATGAATCTTGTCTCAGAGCATTGTAATTTAGCCTACGGCCTTGTTCACACAAATAAATCTGGCATTAG
 TTCCAGCTGGCAGTGATATGGGCTTGGTGATTCATTTTAGGCTCATTGGAGTAGAGTTAAAGAAACCTTCATTGTGAG
 AAAGAGTGAGATCTCTACCATGTGTCTTCTAAGAGTGTTTACAGAGTGTTTTTTTTTTTTTTTAGCGTGCAGAAGTCTAACTT
 TTTTCTAGTACCTCCATTCTCTTTTTTTTATTGAAACATAAGAATTGTGCATATTTACAGGGTACATGTGATATT
 TTTATACATGTATACAATGTGTAATAATCAAAATCAGAGTAATTAGGTATCAGTTACCTCAAACATTTATCCTTTGTTT
 GTGCTGGGAACATTTCAAATCTCTTCTTAGCTATTTTGCAATATAAAATAAATTACTATTGCCACCTTATGATACTA
 TCAAACACTATAACTTATTCCTTCTATCTAACTGTATTTTTTTTACACATTAACCAAATTCCTCTTCATCTCCTCCCTGCT
 TCCCTTCCCAATGTCTGGTAACCATCATTTCTACTTTCCACCTTCATGAGATCCACTTTTTTTAGCTTCTTATATGAGTA
 AGAACATGCAATATTTGTCTTTTGTGCCATCGCTTAACGTAATATACTCTAGTTCCATCTATGTTGTTGCAATAACA
 GAATTTCAATTGCTTTTTTATGGCTGAATAATACTATATTGTGTATATATTTACATTTTCTTTTTTTTTTTTTTTTTT
 TTTTTTTTGAGACAGAGTTTCGCTCTGTCCGCCAGGCTGGAGTGCAGTGGCGCGATCTCGACTCACTGCAAGCTCCACC
 TCCCGGGTTACGCCATTCTCTGCTCAGCTCCCGAGTAGCTGGGACTACAGGCGCGCGCCACCATGCCCGGCTAAT
 TTTTGTATTTTGTAGTAGAGACGGGGTTTCAACCGTGTGAGCCAGGATGGTCTCGATCTCTGACCTCGTGATCCGCCTGT
 CTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCGCGCCCGGCCACATTTTCTTTATCCATTCTACTG
 ATAGGTATATAGGTTGCTTCCATATCTTGGCTATTGTGGATAGTGTGTAATAAACATGGGAGTGCAGATATCTTTTTA
 ATACAGTGATTTCAATTTTTTAAATGTATTTCCAGCAGTGAGATTGCTGGGTCACTGTAGATCTATTTTTAAATTTTTT
 GAGGAACCTCCATAGTGTTTTTACAGGAGCTGTACTAATTTACATCTCACTAACAGTGATTAGCATTTCTCTTTCT
 CTACATCCTTGAAAGCATTTGTTATTTTTGTCTTTTGTATAATTACCATTAACTGGGGTGGGATGATATATCATTTG
 TGTTTTTCATTTGCATTTCCCTGATAAATTAAGTGATTTGTAGGTTTTTTTTTAAATACACTCATTAGCCATTTGTATGCTT
 TCCTTTGAGAAATGCTATTTCATATCTTCTCTGCTTTTCAATGGGATTATGTACTTTTTTACCTTGTATATTCTGGAT
 GTTAGTCCCTTGTCAAATGAATAGTTTGYGAATATTTCTCTCATTTAACAGGTTGTCTCTTCACTCTGTTGATCATTT
 ACATTTGTTGTGCTGAAGCTTTTGTAGCTTGATGTAATTCATTTGTCTAGTTTTGTCTTTGTGCTTGTGTTTTTGAGGTC
 TTACCTAAAAATCTTTGCCAGACAGTGTTCTTCCAATTCATGAGCATGGGATGGATATCTTTTAAATCTTTTGTGTC
 CTCTTAAATATTTTCAACAGTGTTTTATAGTTTTTCAATCCAGAGGTCACTTCTGTTTGGTTAAATTTTATCCAGA
 TGTGTTTTTGTGTGTGTGTGAAGTATTGTAAATGGGATTACTTCTTGATTTCTTTTTTCAGATTGTTCACTRTTGGTA
 TATAGAAATGTTACTGCTTTTTTGTATGTTTATTTTGTATATTGCAACTTTAATGAATTTGTTTTTCAGTTCTAACAGGT
 TTTGGTYGAGTCTTTAGGTTTTTCTAAATATAGGATCATGTCTGTGAACAATGATAGTTTGACTTTTTCTTTTCCA
 ATTTAGATGCATTTTGTATCGTTCTTCTGCTTAAACCGCTGTGATAGGACTTCCAGTGCTATCTTGAATAACAGTGGTAA
 AAGTGGGCATCATTTGTCTTGTTCAGATCTTGGAAAGAAAGAAATTTCCATTTTTCCCATTCAGAATGATGCTAGCTGTGG
 ATTTGTCTATGTAAGATCTTTATTTGTTTCGAGGTATATTTCTTATGTATCCAGTTTGTGACAGTTATTATCATGAAGGA
 ATGTCAAATTTTATCAAATGCTTTTTTCAAGCATCTATTGAAATGAGCATATGGTTTTTGTCTTCACTCTGTTGATACAA
 TGTRTCACATTGATTGATTTACATATGTTGAATTATCCCTGCAACCCTGGGATAAATCCCATTTGGTTCATAATGAATAT
 TTTTAAATGTTTTGTTGAATTCAGTTTGTCTGATTTTGTAGGATTTCTGATCTGTGTTTCACTGATCTGATGACTGACCT
 GTAGTTTTCTATTTTGTGTTTATCTAGTTTTGGCATCAGGATAATCCTGGCCTTTTAGGATGAGTTTAGAAGT
 ATAGTTTAGAAGTATCCCTTCTCTTCAATTTTTTTGAAACAGTTTAAAGAGAATTGGTATAGGTTATTCTTTAATCGT

120/375

TTGGCAGAATTTCAGCAGTGAAGCTGTCAGATCCTGGGCTTTCCTTTAATAGGAGGCTTTATTACTACTGCAGTCTCATA
 CTCATTACTGGTTTTTCAGGTTTTCTCTTTTTTCATGGGTTCAATCTTCATGGTTTGCATGTGTCCAGAAATTYATCCAT
 TTCTTTTAGGTTTTCTATTGTGGTGTATCAATTTTCATAATCTTGCTGTTGCTTTTTTTTTTGTATTTCTGTAGT
 ATCAGTTGTAATATATTCTTTTTCATCTCTGACTTTATTTTTTAGACTTCTGGTTGGTGTAGCTAAAAGTTTCTTGATT
 TTTTTTCAAAAAACCAACTACATTTTGTGTGATCTTTTGTATTTTTGTAGTTCAAATTTTATTTATTTATGCTTTGATC
 TTTATTATTTCTTTCTTCTACTAATTTTGTAGTTGATTGTTCTTGCTTTTTTAGTTCCCTTGAAGTACAATGTTAGGTT
 GTTTGTTTGAAGTCTTTCTACTTTTTGTAGTGTAGGTGTTGATTGCTACAAATTTCCATCCTAGAACTGCTTTTGGTATAT
 CCTCTAGGTTTTTGTATGCTGTATTTCCATTTTCATCTGTCTTAAGAAAATTTTTTAAATTTCTTTTTTAATTTATTCA
 TTGACCAATTTGTTTTTCAGTAGCATGTTGTTTTCTTTCCATGGATTTGTACAGTTTCCAATGTTCTTCTCTTATTGC
 TTTATAGTTTTATTCAATTGTGGTCAGAAAATATACAGGATATGATTTTGACTTTTTTGACTTTTTTAAACTTGTTTTG
 TTACCTAACATATGGTCTATCCTAGAGAATGTTCCATGTGCTGTTGAGAAAAATGTGCATTTCTCAGCATAGGGGTAAA
 ATGTTCTGAAAATGTCTGTTAGGTCAATTTGATCTAGAGTAAAGTTTAAATCTGATGTTTCTTTGTGATTTTCTTGTC
 TAGATTACCTATCTGCTGCCAAAAGTGGAGTGTTAAAGTCTCCTACTATTGCCTTCTCTGTTGTTTTTAACTGTCCTTG
 ACTTAAGGTCTGTTTTATCTGATAATTATAGCTTTTACTTCTGCTCTTTTTGTTTGTGTTTTTCCATTTGCTTCTAATA
 TCTTTTTTAAATCTTTCACATTCAGTTTGTGAATGTCTTTACAGATGAAGTGAGTTTCTTGTAGACAGCATATAGTTGG
 ATCCTTTTTAAAAATTCATTCAGCCACTCTGCTTTTTAACTGAAGAATATAATTCATTTATATTCAAGGTTTGAATATTA
 TTGATATGTAAGGATTTAGTATTGCTATCTTGTTACTTGTTTTCTGGTTGTTTTGTAGAATCATTCTTTCTTTTTCTC
 TCTCTCTTACTTTTCGTTTTTGTACAAAATAATTTCTCTATTAGGACATGTTGATTTCTGGCTACTTATTTTTAGT
 GTATCTATAATAGGTTTTTGTCTTTGTTTACTACAAGGCTTATAAAAATATATTTATAACAGGTTATTTTTAACTGAT
 AATAGTTTAACTTTGATGCAAATAAACAAAAATAACTCTACATTGTAATACCACCCCTCCCACATTTTGACTTATTG
 CTGTTTCAATTTACATATTTTTATATTGCCTAACTCTTAATCAATTGTTGAGATTATTTAATAGTTCTTCCTTTTAGCT
 TTCATACTTAGGATATAAATTGTTTACTTACCCTAATTATAGTATTATAGAATTATGCATTTTTCTGTTTTTAAATAGT
 GAATTTCACTTTTAGGTTTTTTTTGTTTTGTTTTTGTTTTTTGTTTTTTACACATTAGCATCCATTTTTTTTTTCAGAT
 TGAAGAATCCCTGTAGCATTTTTTGTAGGCGAAGTGTCGTGTTGTAATTTCTCAGCTTTTGTGTTGTCTGAGAAAGT
 TTTTTATCTCTTTTCTGTTTAAAGGATAGTTTTCTGCGGTATAGTATTCTTAGCTGGCTTTTTGTATTGTTTCTT
 CAGCACTGTGAATATAGCATCTCACTTCTTTTGGTCTGCTAAGTTTCTCYGAGAAATCCGCTGAAAGCCATATTAGAGA
 TCAGTTGAATGTAATGTTTCTTTCTCTTGCTGCTTAAAGTATTCTTTCTTTGTTTTTGATTTTTTACTAATTTCAATT
 AATATATCTGGGTAGTTTTCTCTTTGAGTTGAATTTGTTTAAATCTTTTGAAGCTTCTGACCTTCCGATTTGATGTTGGTT
 TCTCCAGATTTTCAGAAATTTCAGCCGTTACTTTTTGAAATATGCTTTCTAGACCTTTTCTCTTTTACTCTTTTTTAAATCTTTT
 TGGAAATTTCTATTATGTGGAAGTTAGTTTGTCTTGAATTTCTTTTTTCAAGCTCACTAATTTCTTCTCTTTTTGATCAAGTC
 TGCTATTGAAGCTTTTCTATGGAGTTTTTCAGTTTCAATTATTATATTGCTTGCTTCTAAAATTTGTTTGTCTCTTAAAA
 TTGTTTTTATTTTTTGTGAATTTCTTATTTTGTCTGATTGTTTTCCAATTTCAATCTGTGTTTTATTGTGATTCTT
 TCAACTTCTTTAAGAGAATTATTCTGAATTTCTGCCTGACATTTTGGAGATGTTGCATTCTTCTGTGTCTATTGTTGG
 AGTTTTGTTGGTTTTCTTTGAGTGGTGTCTATTTCCCTGAGTTTCCACAATCCTTGTGTCTTTATGTTGATGCTTGTGT
 GTTTGAAGAGTCAGCTACCTCTTCCAATTATTGTGGGGGTTTTTTTGGTGGTGTAGGCCTTTATTCCTTAGTAATGAA
 ACTTCAATGTTGGCCTGTTATTTCTTCCATTCTGGGAGTCTTATAGTGTGCACTGGTACAAAAACACTTTGCTGGAAC
 TAACTTGTGCCCCTGCCATTGTTTCCCCTCTGGGGATGTTTTATAGTGAGCACTGGAAGTTAAAAGCTGTCTCTGAAAT
 TATATTGCTGCCCTACAGTTTTTTCCCAGTCTGGTAAAGACAGGTGAGTACCAGAACTCAGTCCCACTTTTAGTTGTT
 TCTGGGCCAGGGGAAAGCTCCACCTGGGATTTATAAAAAATTCAGCCACAGATTTGGGCCTTTGCTTGAATGGTGCCCC
 CCCTTGCAGCACTATGGCATCATCCAGTCTCTTCAACATGGCACCCCCACTGATTGAAGCACAGAGTTGCTGCCTAGAT
 CTGCATGCCAGTCTTTGAGATTAATGTCTGTGCTTGTCTTCCAATCAGCCCTCTGGGATACCCAATGGTTCCCATAT
 GATGGGACTGGAGTGGGCTTCCCATGAAGATTCCAGACTGATGGGGAGATTGAACATTTCTCTGCTCTCTTGAGTTG
 TCAACCATGTGTTTGCATTTAGGCAGCAGATGGAATTATTGCAATCATTTACTTTATAAACCATTGTCCCCCTTACT
 ATCTTACAATCTACTTTTCATATAATTGTGATGAGTTTTCTGCTGTTATGGAAAATTCATTTATGGCTAAAGCTTTTA
 GTAAATGCTATGAAGCTTGAAGCTAGACTCTCTCTACTGTAATGGGAATAATTATGCATTAGTTTCATAAAATGTTCTTATGAGT
 TTGTTTAGTCACTAGAAAGCTAGAATACTGATGCTTAAATATAAAAAATATATAGTTTTAAAGAGCTATAATATCTAGC
 AGTTCTTTTGTCTTCTAAAGCTCCCTGGACATTGAGTAACAAATAAGTTAATAAAGCAATAGTTTGTATTGATTTTAT
 ATCAGAAAGCCTAAATAGTATTTTAAAAATAAAGCTTCCATATATTCAATCTTATTGGAAAAAGTATTTGAAAAGCTCA
 ACCTCAGCTTCCCCTGTTGTTTTATCTAGAATATTTAAGACTTTCTTAAACATAAATCATCAAAAATATGTATTTTTCT
 AGTTGAGATTTAACTAGATTAATTCAGTGTGTGGTATTTTTGGCTATCATAATAAAGGTATTGCATTTCCAACTGCAG
 AATATTTGCACTGAGTAAAATAGATGCCATTTTTTTACTAAGTAATTTAAACATTGTGAGAGGATATGCTTTTAAAAAT
 TATCACAATAGCTGTAAAGTCAATTGTGTTAATATTGGCAATCTGTCCCTTCTATTTAGAATTTTGTGCTTACTCTCT
 GATAATTGCATCATTTACAAATCCCCTCTTTACATAAACATGGCCTTTACCTAACCTCTAAATTAATCAGCCCTCTT
 TTGATTACAAGTGACAGAACTCAAATCAAAATAGCATAAGCAATTTAAATAATAACAACAATAAATGATGAAAGTTTA
 TTAGTTATCTTAGCTGGAAGGATTTTTTAAAGATGTAGAAATAAAATGAGTAACTGTAGAGTCAGTGCCTCAGAGACTCA
 CCTCGTCATGAGTAGGACTTTTTCCCTCCATCACTTTCTTACCTCTTCTTAGCTACATCTACATGAAGGCATTTCTCCAC
 TTGGAAAAAAGACGGAGGCACAACCTCCCATAGAAAAGAGTTTCTTTCTCCCATATCAATATATCTGCTTGGATTCT
 GCTTGGCTATTTGCTTGGATTAAATGTTTACTTTTTAGATACATTACTGCTAATAGAGAATGAGAAAAATAAGACTGGCT
 ATGCCTGGAGGTTAGGAAGTGAGGAACAAGAGAGGGGCTTCGCAAGAATCATGTGGAATGATTGTGTGATGCTTTCTGA

121/375

AAGGACATGAGTCTAGGCAGTCAAAAATACCTGGCTAAACACCCTAAGGCTATATTCCCTCTATATATTCCCTATTCCC
TATATTCCCTCCCTTACCCAACTACCCAGCATCTGCTATTCCCGAACTCTTTTCCCTCTCATTTTTTCATTTCTA
TTGGAAGATTAAACCTGTGAATAATCTTTTCAGGTTCTACCTTTAAAAATACAGGACAAAGACAAGTCTTCATTATAC
TCTTATCTCAGTGGAGTAAAGAAAGTATCTAGAGTTCTGTCTCTTTTCAAAGTAGATTATTACTCTTAGGAAAAATAA
AATGGGCAATCAGAGTTTATATTCAAATATCTCGTAACACCTAAATAAGGCATGGACGCTGAACAATCAGAATTGGT
CTTTGTGTAGACATTGCATCCTGGAGGCCGCTATTATATCAATCAGGCTTAAATTTCTCATTGCTGGATCATTACATG
GTCCTACTTATCTGGCTGATGGGGCAGGTTAACAGTTGAGGGCTAGGGGAGTTCAAAGTAGTAATTATTTATCCACCAG
GACAGAACTATGTAATATTTTGGTAATAATACATGACTGCTGACTAACCAAGGCGGGTCACTATGTAGGGGTGCAGGA
TTAACAGTTACTTAATAGAATTAGCCCTGCAGTGACAACTTTAAGAGAGTTACGTGTTTGGAAACATTGATTTAAAATG
TTCTTTTAAGTAGTTGCTTTGTAGCTTGCTTGTTTTGTCTTTTCCCAAATGTACTTCAAATGGGTCACTGAATAT
CTTCAAATTTGTATGTAAATTTTGGAGGGGAAGTGGTATATGCAGATTTTCTGGAAGAAGACCAATCACTTT
TGCCAAATTTCTCAAACAGGCCCATATTTCTCTCACACATGCGTGCATGCGCACACGCGCGCGCACGCACACAC
ACACGTTAAGATGCGAAGAATCACTGTCAAAAATGTCAATTTCTAATTTCTGTAAATGGGGAGAATTTCTCAAGCTT
ATATAAAGTGATGTAAATAATTCACTTACAATTATAAAGAAATGGTATCACAGCAAAATCCCTTTGGCACCCCACTGA
AAATTTCTCTCTGATGTTTAAAACACCATTCTATGCTTACTCTTACAGCTGTATTATAATCAGATAAGGGGTTTATT
TCTTGTCTATTTTGTCTAGCATATTACCAATCTGGTTTCACTGAAGTCACTGGGTAAAAATCTAAAAATGTTTCAATG
ATTCTTCATGAATTTTTCACAAAGCAATAATGTATGAAAAAGTGAACAATATAACATCAGCCAGAGACGCCCTCAGTTCG
CAATTTACAATGAAGAAAACTGGCATATACTTTAGAGGGAATTTCTAATAAGCCAAAAGGTTAAAGCTAAATGGGGTTC
AAGAGCTGTACCTTGACAAATGGTAAAGTCTAACCTTTGGCTCCCACCAGGCCAGACCATAACCCTAGAGTTACTAAA
GAAAGCACTGTCAAGGAACAAGCCCATTATTAAGACTGTTACTTAAAGTTCTAAGGGAACCTTCTTAAACGTTCTAT
GTGTACTTTTATTATCTTGAAACTTTTGGGAACAGCTGTATAACAGGAAGTAGTATTTCTGAGGCCCAGGAAGTGAGT
AAGGGCTACACAAATTTGGGGCTAATGACTCTATTTTGAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAAC
TGTTTTATGATGAAAGTCTACTTCTCTATCTTCCATACTGTTTGCCATCTTCTTGATGATTACATCTGATGACCAAGC
TCAGGCTTTCCCATACAAATTTATTTTGCCAAGTTTGCTTTGAAAGAATATTAGATTTTGTAGAGTTTACATTATTAA
AATCGTGAGTGGCTTCTTTTGCTTTTCACTGTTGAGTGTCTTTTGCTACAGCCTAACCTATCTTTTCTTATTGCTTGT
TTCTTTGTATTTGCTACTCAATATAGCTTGTCAAATGTGTAATTCATGTCAATATACAGTGCTGTCTAATATAATTCATG
GGTATAAAGTGAGAGAGAAATGTAATTTCTAAAGTTACTTGAGGTGGACCACTAAAAGGTCCTGAGTTTCATTTATTTATT
CAGCAATATATATTGTCCAATTGCAAGCTAGGCATCAAGTATATTCAAGGTGGTAAATAAAATGAGCCTGATCACTTC
TTTTAGGGCATTACAGTGAAGTGGAGGGGACGGACATGACTCAATCAGGTGAACACATCAGCCATATAAATTACAAATG
AACATGAGAGCTGCAAAATAAATAGACGAGAGAGCTTTGAAAAAGAGTAAATAAAGGGGGCTACCTCAGATGGAGGGAGG
AGAGGTTTTATAGCAAACTTCTCTGAGAAGAAAAATATTGCTATGACCTGAGAAATCAGAAGGTGTCAAGGTG
GGAGAAAGAAAATTTAAGTAGAGCGAGCAGCATGCCAAAGTCACTAGAGGAAGTGAAGGAAGTGAAGGAAGTGAAGGAAGTGA
TGGCAAGAATGAGTAGGAGAGAGAATGGCACAAAAATGAAGAACAAGAGGGCAGTGTGGCAGCACTACTGCTGATACCCA
GATATGTGACATTCCACCTCATTCCAGACACAAAGTAGAATTGCACTTCTGCTGCTCCCTTGTGTTTGGGTGGGGCCCTG
CTACTAGATCTAGCCAGTGAGTTGTGAGCACAAATGATGCCTGTAACCTTTCTGGTCAATTTCTGAAACTAAAGTATGTA
ATGGATCAGATCACCTCTGCACTAGAGTAGTCAATTCAGTAAGACAAGGAGGAAAAATGGTGTCTGGGCCCTATGTGAGGA
GACTATAGTGTCTAGTCAGTTTGGGTGTCTGTAATAAATTACTATAGATTAGGTGGCTTAAGCAACAAACATTTATCT
CAGTTTTGGAGGCTGGGAAATCCAAGATTAAGGTGCTGGCAGATTCAATGTCTAGTGAGGGCACCTCTCTTGGTTTGCA
GGTGGGTGTCTTCTGTTATATCCTTACATCGTGGATAACAGAGAGAGGAAGCAGGATTTCTTATTCTTCTTATAAGG
GTATTAATCCCATTTATTAGGACTCTGCCCTCATTACCTAATTACCTCCCAAAGGCCCTACCTCCTAATGTCAACAC
TAGAGGTTAGAATTTCAACATATAAATTTTGGGGGGCAGAAAAACATTCATTCCTAACATAGAGGGTGAGGAAGATGA
GAGGAAATGTCCCTTTCAGAGACTGAATTGGGAAGTAAACCCTTTGTGTAATATTGCAGTAGGTACTGCTATAGTGAG
GAATGGAGAGTGGATGGGGAGAACTCTCCTTTGGTAAGAAGAAGGAAGAAAAAGATGTAAAGTAGTGCTATGATCCTG
ATGAATTTACTTTACTCAAACCTTTCAATTAACCTCTACAAACAAAAAAGAACCTGAGAAGACTTTTGTGTAGTCACTTTCC
TGTGCATTGAGGAATTTGTCCAGAGGGACTAGGGAAGCCCATCAGACTAATGGCAGACCTCTTAGCAGAAACTCCACAAG
CCAGAAGAGATTGAGGACCAATCTCAACATTTCTTAAAGAATTTTCAAGCAGAGAAACTCAGGATTAAGAACTCAC
TCAAAATCCACACAATTTCTATGGAATTTGAACAACCTGCTCCTGAATGACTCCTGGTTCAATAATGAATTAAGGCAGA
AATCCAGAAGTTCTTTGAAACCAATGAGAACAAGAGACAACTATACCAGAATCTCTGGGACACAGTTAAAGCAGTATTA
AAGAGCTAGAGAGGCAAGAGCAAACCTAATCCAAAAGCTAGCCGAAAACAAGAAATAACTAAGATCAGAGAAGAATTGA
AGGAGATAGAGACATGAAAACTCTCCAAAAAATCAACAATCCAGGAGCTGTTTTTTTTTTTTTGAACAACTAACA
AATAGATAGACCCTAGCTAGATTAAATAAAGAAGAAGAGAGAGAAGAAATCAAATAGATGCAATAAAAAATGATAAAGG
GATATATATCATCACTAATCCACAGAAATACAACTACCATCAGAGAATACTATAAACACTTCTATGCAAAATACACTA
GAAATCTAGAAGAAATGGATAAACTCCTGAACACATACACCCTACCAAGACAAAACCAGGAAGAAGTCAAATTCCTGA
ATAGGCCAATAGCAGTCTCTAAAATGGAGGCAGTAATTAATGGCCTACCAACCAAAAAAATCCTAGGACCAGACTGATT
CCCAGCTGAATTTTACCAGAAATACAAAGAGGAAGTGGTACCATTCTCTTCTGAAGCTATTCCAAACAATTGAAAAGGAG
GGACTCCTCCCTAACTCATTATGAAGCCAGCATCATCTGATACCAAACTGGTAAGAGACACAACAAAAAAGGAAA
ACTTCAGGCCAATATCCCTGATGAACATCCATGCGAAAATCCTCATAAAATACTGGCAAACCAATCCAGCAGTGTATC
AWAAAATTTATTCATCATGATCAAGCCAGCTTCATCCCTGAGTTGCAAGGCTGGTTCAACATATGAAAATCAATACATG
TAATCCATGACATAAACACAACCAAGACAAGAACCACATGATTATCTCAATAGATGCAGAAAAGGCTTTAATAAAAT

122/375

CAACATCCCTTCATGTTAAAACTCACAATAAACTAGGTATTGATGGAACATTTCTCAAAATAATGAGAGTTAATTATG
ATAAACCCACAGCCAATGTCATATTGAATGGGCAAAACCTGGAAGCATTCCATTTGAAAACCTGGTACAAGACAAGGATG
CCCTCTCTCACCCTCCTATTCTACATTGTATTGGAAGTTCTGACCAGGGCAATCAGGCAAGAGAAAGAAAGAAAGGGT
GATCAAATAGGAAGAGAGAAAGTCAAATTGTCTCTGTTTGTAGACAACATGATTTTATATTTAGCAAACACCATCATCT
CAGCCCCAAAATTTCTTAACTGATAAGCAGTTTCAGCAAAGTCTCAAGATACAGAATCAATGTACAAAAATCACAAGCA
TTCTTTTACAGCAATAATAGGAAAGCAAAGCAGAAAGCCAAATCATGAATGAACTCCCATTCATAATCACTACAARGAG
AGTAAAATACCTAGGAATAGAGCTAACAAGGGATGTGAAGGACCTCTTCAAGGAGAATATAAGCCACTGCTCAAGGAA
ATAAGAGAGGACACAAACAAATGGAAAAACATTTTCATCCTCATGGATAGGAAGAATTGATGTCATGAAAATGACCATAC
TGCCCAAAGTAATTTATATAATTCAGAGCTATGCCCATCAAACATCATTTGACATTCTTCACAGAATTAGAAAAGACTAT
TTTAAGTTTCATATGGATTCAAATAAGACTTTGGATGGCCAAAACAATCCCAAGCAAAAAAAGCAAAGCTGGAGGCAGC
AGGCTACCTGACTTCAAACATATACTGCAAGGCTACAGTAACCAAAACAGCATGGTGTCTGGTACTGAAACAGACAAATAG
ACCAATGGAGCAGAACAGAGATCTCAGAAATAACACTACACATCTACAACCATTGATCTTTGACAAACCTGACAAAAA
CAAGCAGTGGAGAAAAGATCTCTTATTTCAGTAAATGGTGGTGGGAGAACTGGCTAGCCAAATGCAGAAAAACAGAACTG
GACCCCTTCTTTATACCTTATACAAAATTTAACTCAAGATGGATTAAAGACTTAAATGTAAAACCCAAAACAATAAAAA
CAGTACCAAGAAAACCTAGGCAATACCTATTTCAGGACATAGGCGCTGGGCAAGACTTCATGACAAAAACACCAAGGCAAT
TGCAACAAAAGCCAAAATTGACAAAATAGGATCTAATTAACATAAGAGCTTCTGCACAGCAAAAAGAGCTGTCAACAGA
GTGAACCTACAGAATGGGAGAAAATTTTCTCTATCTGCCTATCTGACAAAGGTCTAATGCCAGAATTTACAAGTAACCT
TAAACATATTTTATAAGAAAAAACCACTCCATCAAAAAGTAGGCAAAGGATATGAACAGACACTTCTCAAAAAGAGATA
TTTACATGGCCAGCAAAACATATGAAAAAGCTCAATGTCTATGGATCATCAGAGAAATGCAAATCAAACCACTATGAGA
TACCATCTCATGCCAATCAGAACGACAATTTATTAAGTCAAGAAATGACAGATGCTGGCAAGGTTGTGGAGAAATAG
GAATGCTTTTACATTGTTGGTGGAAATGTAAATTAGTTCAACCATTGTGGAAGACAGTATGGCAATTCCTCAAGGATCT
AGAACCAGAAATACTATTTGACCCAGCAATCCCATTACTTAGTACATACCCAAGGGAATATAAATAATTCTACTACAAA
GATACATGCACCTGTATGTTTATTGACGACTATTTACAATAGCAAAGACATGGAACCAACCAATGCCCATCAATGA
TAGACTGGTTAAAGAAAATGTAGTACATATACCCATAGAATACTATGCAGCCATTAAAAGGAATGAGACCATATCCTT
TGCAGGAACATGGATGAAGCTGGAAGCCATCATCCTCAGAACTAACACTGGAACAGAAAACCTGAACACCACCTTATTCT
CACCCATAAGTGGGGGTTGAACATTGAGAACACATGGACACAGAGAGGGAACAACACACACCAGGGCCTGTTCTGGGGGA
GGGGATTGAGTGGAGGGAACCTTAGAGGATGGTCAATAGGTGCAGAAAACCACCATAGCACACATATACCTATGTAACAA
ACCTGTATGTTCTGAGCATATATCCCGTTTTTTTTTACAAGAAATAAAATAAAGAAAAAAGAAAATCTCTTGCAACC
AATGAAAATGAAAACAAAATATACCAAAACATATGGGATACAACATAAGCATTGCTAAGAGGGAATTTTCATAGTGATAA
ATACCTATATTAGAAAAGAAGAGAGGATTTTAATTTAGCAGACTCACCTAGAGAGCACAACCTCTGATTTTGTGGAGAA
GCCTATCTCCACAGAACCTAAAACACACAACTTTCAAGGTAGGGGAGATTGGAATCCAAGAAGAATGCAAAAACATTT
TGCAAGCTGGTAAGTCTCTGGACTGGGAGAAATCTTGGATCAGGAAGGAGGCAAGATGGTCAGCTAGATGACGCCAGAAG
GAACATCTCCCAAGGACTGGGACATCAGAAAGACTGGCACACTCCTAGCAGATCTTCACAGGGAAGGCAGAGG
GCAGATAGAGGGAAGACACAGATGCTGGGCTGCAGAGGGAGGAAGCTGGGAACCCTGAGCAATGCTAGTGCACACCAGG
ACCGGTTCTGTTCCCAAGAACTCCTGGGGATGGGTGAATTTGAACAGGCCAGGAGCGATCCACTCTCGCATGGATCT
CTGGAATCCTGGCATGGGGAAATCCTTTAACCACCATGGACATTTGAATTTGGCAGAGAGAGCTGCTTAGAGAAGTGGA
GGGACAGAAGTCCAGCCAGTGCAGAGCCCAAAGGTTTGGAGTGGGAGCACCTATAGTGGAGCATGGCCAGGGACACCC
ATCTCCCTAAGCTAGACTTGTTCATAGGAGACTGTAGCCCTAGGGGAACCTGTACCTGAACCTCTGCAGGGAGGTCYT
GCCCATGAAATGGCAGTCCACCTTGAGTACCCCTTGGTCTGCTGGCCTCTCCAGGGGCCCCAGCCTGGCTGCAGGTGC
TTGCAGTGCAGTCCCAGGTAGCTCGTGGGGGCTGCATTACAGCTCCTGTTCTAGTGGGTGAGGCTGACTGGCAGAG
TGCTCCAGCATAGCAGTCCCTGCAGACACCAGCATGCTTGTGGCCTCCACAACTGCAGCGTCCCCATGCTACTTGGC
CTTCACATACTCACCAATGGCCACCCCCACATTGCTTTGCCACCATGTATTTGCATGGGCAGACTTTGCCTTCTTACC
CCACCAGGATATGTGCATGCATGCATCTACCATACCGTGTGCTGCTGCATGAGTGCACCTTGTGTTGCCAACACCCCACT
AAACCACCATTTGTTGTTAGAGCACTGGGTGGCACAGAGCCCACCAGCCCTGCCTTTGCCAGCATCTGCTCTGGCACCA
ACACTTCCAGCAATGTGAAACTGGACACAGAGAACAGCAGAGTCACCCCTGCCTTGAGCAGCCACCCTGCCTGCATGA
AAACACACAGAGGGTCCACAGTCTTGTGTCCATCAGCACTTCAACCCCATGCTAATACCACCAGCAGCAATGCACA
CAGCTCACTGGTGGGGTCCCCGCCCCCAAGCCATGTGCCATGTGGCCACCCTGCTGCTGTGTAATGCCACACAGA
GGCCAGAACCCCAAGCATGCTAGCACACTGCCACATCCAACAAGCATGACCCCTGCTGTGTTGGCACTGTCACTGCTG
CTGGCAGATGCAAAATGAGAACAGATTCTGCTGCCCTGTGCCCTATGAAGCTCTTTGTCTGGCACTACCCATCAGAGTGTT
GTGACCAACAGTCCAGAAGTAACCTCAGCCCCCTCAGTGCAGCAGGTTCTTAACCTTGAGGAGCCAGAAAACAAAGTTGG
GAACTGATACAGTCCCCCAGGGTTAGAGCACACAGTCCACGAGTCTGAGTTGAGTCTTGGTCCCCATAAAATCTTCCA
GAAATTGAGCCAGTCAACTGAACCCACCTTATACCACCATGAAACACCCAAGGTCATGAAATAGAACAAAAGAAAAA
TCCAAAGGACAGTAATTTCAAAGATTGGAGGAACAGGCCAGGCGTGGTGGCTCACACCTGTAATCCCAGCACTTTGGGA
GGCCGAGGTGGGTGGATCACGAGGTCAAGATATCAAGACCACCCTGGCCAACATGGTGAACCCCATCTCTACTAAAAA
TACAGAAAACCTAGCCGGGCATGGCAGTGGGCGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATGGCGTGA
ACACGGGAGACGGAGCTTGCAGTGAAGCCGAGACTGCACCCTGCACCTCCAGACTGGGCAACAGAGCGAGACTCCATCTC
AAAAAAGAAATTCGAAAAGATTGGAGGAACATCAGACCACAAAGATGAGAAAAAACCAGTGTAGGAACCTTAAGAA
CTCAAAAAGCCTGAGTGTCTTCTTCTCCAAATGATCATACTAGTTCTCCAGTAAGAGTTCTTAACCTGGGCTGAGGTG
GCTGATATGACAGAAATAAAATTCAAAATATATATAGAAATGAAGATCATCAAGATTGAGAAAGATGTTGAAACCAATC
TGAGGAAGCTAGGAATCACAATAAAATAGTACAGAAGCTGACAAACAAAACACTCAGTATAGAAAAGAGTGTAAACCAAC

123/375

CTGATAGAGCTGAAAAACACAGTACAAAAATTTTATAATTTAATTGTAAGTATTAACAGCAGAATAGACCAACCTGAG
GAAAGAATCTTTAGAGCTTGAAGACTGGCTTTCTGAAATAAAATAGTCAGACAAGAATAAGAAAAAATAATAAAAGGA
ACAAACAAAACCTCCAAGAAATAAGATATTATGTAAAGAGACCAATCTATGACTCATTGGCATCCCTGAAAGAGATGG
AGAGAATGGAAGAACTTGGAAAAATATTTTCAAGATATCATCCATGAGAACTTCCCCAACCTAGCTAGTGAGGCCAGC
ATTTAAATTCAGAAATGCAGAGAACCCCCATAAGAGACTTCACAAGAAGATCATCCCCAAGACAGACAATCATCAGATT
CTCCAAGGTTGAAATGATAGAAAAATGTTAAAGGTAGCTATAGAGAAAGGACAGGCCACCTACAAAGGGAAGTCCTTC
TGACACAGCAGACCTCTCAGCGGAACTCTACCAGCCAGAGAGATTGGGGGACTATATTAACATTCCTTCAAAAAAGA
TATTCCAACTGAGAATTTGATATCTGCCCCAACTAAGTGTCTATAAGCAAAGAAATAAGATCCTTTTCAGACAAACA
AATGCTGAGGGAATTCCTTATCATAGACCTGCCTTACAAGAACCCCTGAAAGAAGCACTAAATATGAAAAGGAAAGACC
GTTATCAGACACTGCAATACACAGTGTCTCTATAAGTACACAGACCAGTGACTCTATAAAGCAACCACACAAACAAGT
CTGCATAGTAACCACCTAACAACATGATGACAGGATCAAAACCCATACAAATTAATACCAACCTTCAAGGTAAATGTCCT
AAATGCTCCCAATTAAAGGACAGAGTGGCAAGCTAAATAAAGAAAGATGACCCAATGGTATGCTGTCTTCAAGAGAC
CCATCTCATATGCGGTGACACCCATAGGCTCAAAATAAAGAGATGCAGAAAAATCTACCAAAAAATGCAAAACAGAAAA
AAACAGGGGTTGCAATCCTAATTTTCAAGCAAAACAGACTTTAACTAACGAAGCTCAAAAAGATGAAGAAGGATATTA
TGTAATGGTAAAGGTTTTAATTCACAAGAAAAGCTGACTATCTTAAATAGGTACATACCCAACAGAGGAGCACCCAGA
TTTATAAAGCAAGTTTTTAGAGATCTTCAAAGAGAATTTGGACTTCCACACAGTAATAGTGGGAGACTTCAACACCCAC
TGACAGTATTAGATCATTGAGGCAGAAAAATTCACAAGATATTCAGGACTTGAAGTCAACACTGGACCAATGGACCTA
ATAGACATCTACATATCTCTCCACCCAAAAACACAGAAATATGTATTCTTCTCATCACCAAATGGCACACACTCTAGAG
TTGATCAGATAATCAGACTTTAGACAATCTTAAGCAAAAGAAACAAAGTCATATTGAACCACAGTGCAATAAAATTAGA
AATCAAGACTAAGAAATTTGCTCAGAACCATACAGTTACATGGAACTAAACAACCCACTTTTGAATGCCTTTTAGGTA
ATAAATGAATTAAGCAGAAATCAAGAAGTTCCAGAACTAATGAGAACAAGATAAAATATACCAGAATCTCTGGG
ACACAGCTAAGGCAATGTTAACCAGGAAATTTATAGCACTAAATGCTCACATCAAAAAGTTAGAAAGATTTAAATAAA
CAACCTAACATCACAATAAATGAAGTGAAGCAAGAGTAAACCAACCCCAAACTATCAGAAGACAGTAAATAACC
AGAATCAGAGCTGAATGAAGGAAATGAGACATGAAAAGCCATTCAAAAGATCAATGTATCCAGGGGCTGTGTTTTTG
AAAAATTAATAAGACAGATGGACTGCTAGCTAGACTAATAAAGAAGAAGAGAGAAGATCCAAATAAACACAATTTTAAA
AATAAGATAGTAATTACCACTGACCCAGAAAAATACAAATAACCATCAGAGACTACTATGATGGTTTTGTGTACTATGC
ACACAACTAGAAAAATCTAGAAAAATGATAAATCCCTGGACATATACACTCTCTCAGACTGAACCAGGAAGAAATTGA
ATCCCTAAGCAGACCAATAACGAAGTGTGAATTTGGATCAGTAAATTTATCAGTAAATAGCCTACCAACAAAAGAAGT
CCAGGACCATTCATATCAGGCCAAATTTCTAGTAGATATACAAAGAAGAGCTGGAATCATTCTTATTGAAACTATTCCA
AAAAATTAAGGAGGAGGGACTCTCTCCCGACATTTCTATGAGGCCAGCATCATCTGATTTAAAAAAGAAAAAACAC
CTGGCAAAACATAGAAAAATAAACTTCAGGCTAGCATTCTTGATGAACATGCATACAATAATCTTCAACAAAATATTA
GCAAAATGAATCCAGGAGCACATCGAAAACTAATCCACCACAGGAATGCAAAACCCACATGATTATTGTAATAGATG
CAACATACACAAATCAATAAATGTGATTTCATCATAATCCACAGCCAACATCATACTGAATGGGCAAAAGCTTGAAGCATTCCACTTGA
AGAAAAATAAGAGTTATCTATGACAAATCCACAGCCAACATCATACTGAATGGGCAAAAGCTTGAAGCATTCCACTTGA
AAACCAGCACAAAGACAAAGACGCCCTTTCTCACCCTCTATTCAACATAGTATTTTAAAGTCTGGCCAGAGCTATCAG
GCAAGAGAAAGAAATAAACAGCAAGGCAATACCAACAGCCAAGGCAATACTAAGCAAGGAGAACAAAAAGAACAAAT
CTGGAGGCATCACACTACCTGATTTCAAATATTCTACAGGGATACGGTATCCAAACAGCATGATTCTGGTATAAAAA
CAGAAACATGACCAGTGAACAGAAATAGAGAGCCCTGAAATAAGGCTGCACACCTACAACCATCTGATCTTAGACAAAG
CAAAGGGGAAAGGACTCCCTATTCAATAAATGATGCTGAGAAAAGTGGCTAGCGATATGCAGGAGATTGAAACTGGACC
CATTGAGTACACTATACATAAAATTAATCAAGATGGGTAGAGACTTAAACGTAACCTCAAGCTATAAAAGCTCT
GGAAGACAACCTAAGCAATACCATTCCAGACATAGGAAGTGGCAAGATTTTATGATGTAGATACCTAAAGCAATTGCA
ACAAAAGCAAAAAATGATAAATGGGATCTAATTAATACAGAGCTTCCTCACAGCAAAAGAACTACCAACAGAGAAA
ATAGACAACCTACAGAATGGGAGAAATATTTGCAAACTATGCATCTGACAAAGTTCTTATATCCAGCATCTATAAGGA
ACTTAAATTTATAAGAATTAACAACCCCATTAAGAGTGGGCAAGGACGTGAACAGACACTTTGCAAAAAAGTACG
TGCAGCTAACAGCATATGAAAAAACTCAGTATCACTGATCATTAGAGCAATGCAAGTCAAAACCCAGAGATGCCATC
TCACATCAGTCAGAATGGCTATTATTAAGAGTCAAGAAATAACAGATAGTGGTGGCAATTCCTCAAAGAGCTAAAAACA
TATACACTGTTGGTGGGAATGTAAATAGTTAACTATTGTAGAAAGTAGTGTGGCAATTCCTCAAAGAGCTAAAAACA
GAACCTACCTGTCAACCCAGCAGTCCCATTAAGTGTATACAGCAAGGACATGGAATCAATCTAAATGCCTATCAATGGTAACTG
GCTCACATATGTTCACTGACGATATTTCAACAGCAAGACATGGAATCAATCTAAATGCCTATCAATGGTAACTG
AGTAAATAAATTTGTGGCAGATATACTCCATGGCATACTATGCAGCCATAAAAGGAATGAGATCGTGTCTTTGCGGGA
ACATGGATAGAGCTGGAGGCTGTTATCTTTAGCAAACTAATGCAGGAACAGAAATGAAATACTGCATTTTCTAACTTA
TAAGTGGGAGCTAAATGATGAGAAGACATGGACACAAAGATGGAACTAGGCTTAGCAACTGGGTGACAAAATAATCTG
TACAACAACTCCCATGACACAAGCTTACTTATATAACAACTTGACATGTATCTCTGAACCTAAAAATAAATGTCTTT
TTAATATCTGGATCCAAATGTTTTACTGGCCAATGAAAAAGATTTTTTGCCAGATGGCTAAATCTTTTGAATAATA
TTTGTGAAAAAGACTTTTAAGATTTTGAATAATATTTGTGAAAAAGACTTTTAATAATATTAGTGAAAAAGACTTCCT
TACAGAAGGCAATTAAGTCTTAATTTAATTTGGCAGCTTTTAATGTGGCAATCTTTGATTCTTTATTCTTTTAGATGG
CTGTGTGCACCAATTAAGAATGCATCCCATTTGCTTAAAGAAATTAATAATTTAAAGAAAAAATCTTAAACAATTTAA
TACTACATCTCAAGGAAGTAGAACAATAACACAGACTAAGGCCAAATTAGGCAGAAAGAGGGAATTAACAAAGATTG
AGCAGAAATACATGAAACGGAAATTCAAAAATAATAGAAAAAATAAGACAACCTAGGAATGGTTTTACTGGTTTTTT

Fig. 6. [18]

124/375

ATAAATATAAACTAAATTGGTAAAAACCTTAAGTAAACTAAGTAGCAAAAAAGAGCGATGCCTCAAATAAAAAAATCAG
 AAATGAAAGAAGAGAAATCACAAATGATGCCACAAAATAAGAAAGAATCAAAAGAGATAACTATGAACAATTATGTGCC
 AACAACTGGATAAGCTAGAAGAAATGAATAAATTCCTAGAAACATACAATCAACCGAGACTGGATTCTGAGGAAGCAG
 AAAGTCCGAACAGACCTATAACTAGTATAGATATTGAAATAGTTATTACAAAGCTCCAGGAAGGAAAAGCCCAGTACC
 AGGTGGCTTCACTGGTGAAATTCCTAACAAACGTTTAAAGAAAAATTTATACCATTTCTTCTAAACCTTTTCAAAAAAAT
 TGAAGGGGAGAGGGAACATGTCCAAATTCATTACTCTGATACATAAGTCAGACAAAAGCACCACAAGAAAACAAACTA
 TAGGCCAATATCCCTGAAGAATGAACATACAAATTCCTCAACTAAACCCAGCAAACTGAATCCAAGAGCACATTAAGG
 GGATTATACACCATGACCAATGGGATTTGTACTTGGGATGTTAGAATGGTTCAGTGTGTAAAAATTAACGTGAAATTC
 CACATTAACAAAATAAAGCATAAAAAACATGTGATCATCTCAAGATACAGAAAAAGGGTTTGACAAAATTTAACATCTTT
 TAATTA AAAACTCAAAGTAGTAATAGATTATGTCAAATACAAATACAAATATTATATACCTCAACATAATAAAAGCCAT
 ATATTAAATGCCCATCACTAACGTCATACTCAATGGTGAAAAACCGAATGAAGGCTTTTCTCTAAGATTAGAAACAAG
 ACAAGGATGCCCACTTTCACTGCTTCTATTTCAGCAGGATACCTGAAGCCCTATCTAGAGCAATTGGGTAAGAAAAAAG
 TAAAAAGGCATTTAAATTGGGAAGGAAGAAATAAAATTTTCCCTGTTTGCAGGTAACATGATCCTATATATAGAGAAAA
 CTCTGAAGATTCAATTAAGAACTGTTAGAACTAACAAATGAATTTAGTGAAATTACAGAGTACAAAATCAACATACCA
 GAATCAGTTGCATTTCTATACACTAACAACTATCTGAAAGGAAATTAAGAAAACAATGCCCATCTAAACTAGTGC
 CAAAAAGAATAAAATAATTTAGTAATACACCTAAACCTAACTAACAAAGGTGAAAGATTTGTGTATTAAAACTACAAAA
 CATTGATGAAAGATACTAAGCAAAATCAAAAGACATTGAATGTTTCATGAAGTGAAGACTTAACATTGTTAAAAATATCCA
 TACTACCAAAAGAAATCTACAGATTCAATGCAATCCCTATCCAAATCTCAATGTCAATTTTTTACAGAAAGTGAAAAAA
 GCTCTAAAATTTATATGGAGCCATGAGTCAAGAAATAACCAATCAATCTTGAAAAAAGAATAAAGCTAGAGACATCA
 CATTTCTGTATCTCTAGATATGTTACAAAACACAGAGATCAAAACAATATGATCTGGCATTAAACAGACATATAGA
 CCAATGGAACATAAGAGAATCCAGAAATAAATCTATGCATCTTGGTTGTTTTATTCTATTTCGGGCTACTATAATAAAA
 TACCATAAACTGGGTAGCTTATAACAACAGAAATATAATTTCTCAGAGTCCAGAAGTTTGGAAATCCAAAATTGAGGCA
 CAGGTACTGATGGACTGCTTCTCATAGTTAGTGCCCTCTCACTGTGTCTCAGATGGTGGAAGGTGAAGCATGCTCTCT
 CAGATGTCTTTTATTTCATGAAGTCTCCACTTTTATGACCTCAATCATCTCTGTAAGTCCCGTCTCCTAATGCCATTCAA
 CATATAGATTTAGGGAGACAAAGATTCAACATATGGATTTTGGGTGACACCAACATTTCAGTCTATAGCAACAGTCAACT
 GACGTTTGTGAAAGGTGCTCAAGAAATACACATAGAGATTGGAGAGTCTCTTCAACAAATGGTACTTGGAAAACTGGATAT
 CCATATTTAAGGAATGAAACTGGATGCTTGTCTTACATCATATGCAAAATCAACTTGAAGTGGCTTAAAGATTAAACAT
 AGACCAAGACTATAAACTACTAGAAGAAAACCTTCATGACATTGGTCTTGGCAATGGTTTCATGGATATGACATCAAA
 AGCAGAGGCAACAAAAACAAAGTAAACAAATAAGAATACATCAAACTAAAAAGCTTGTGGGTGAATTGTTTGAGCTCA
 GGAGTTCGAGGCCAGCCTGGGCAACATAGTGAACCTTGTCTCTACAAAAAATTAAAGAAAAAATTAGCTGGATATGGT
 AGGCTCACACCTGTAGTACCAGCCACTTGGGAGGCTGAGGTAGGAGGATTGCTTGCACCTGGGAGGTGCCAGAGGTTGC
 AGTGAGCTGAAATTGGGCCACTGTACTCCAGCCTGAGTGACAGATCCAGACCCTATTGCAATAATAGTAATAATAATA
 ATTAATAAAATAATGATATGAATCAACAGAGTGAAGAGGACACTTACAGAATGGGGGGAATATTTGCAAAACCGTATATC
 TGATAAAGGGTTAGTATCCAAAATATCTAAAATAAACCCCTTCAGGTTATTAGTTAAAATAAAAGAGAGAGAAAAATAA
 ATAAATAAAATAAATAACCTGATTTAAACATGGGCTATGGACTTGGATAGACATTTCTTCAAAGAAGACATACAAATGGC
 CAACAGATATTTTAAAGAAATACTCAGTGTCACTAATCATCCAGGAAATGTGAATTAAACTATAATGAAATATCACTTA
 ACACCTACTATAGTAGAATGGCTACTGTTAAAAAAAACAGAAAATAGCAAGTGTGACGAGGATGTACAGAAATTGGAA
 CCCTTGACACTGTTGGTGGAAATGCAATATGGTGCAGCTTTTGTGGGAAACAAATGAAGTCTCTTAAACATTTAAAA
 ATGCAATTACATGATCCAGCAATCCCACTTTGGGGTGTATTATTCAAAGAATTGAAATCAGGATCTCAAAGATGTATTA
 GCACTCCTATATTCATTGTAGGATTATTCACAATAGTTAAGATTAGAAACAACCTTAAGTGCTATTTGACAGATGAATA
 GATGAGAAAAATATGGTATATAAATAGTGGACTATTATTGAGCCTTAAAAAAGCAGGAACATTGCGGTATGTGACAACA
 ACATGGATGAACTTAAAGACATTGTGCTAAGTGAATACATGAGTCAAGAGACACATATTGCATGATTCCACTTA
 TATGAGTTATCTAAAATAGTCAAATTCATAGAATCAAAGAGTTGGATTGTGGTTACCAGTGGGTGGAGGTAGAGAGAAG
 GTAGAGAGAAATGGGGAGTTACTAAACAATGGGCGTAAAGTTTCAGTCAAGAAAGATGAATAAGTTCTAGGGATCTGTT
 ATACAACATTGTACCTATAGTCAACAATAATGTATTGTACACATATGCATTTGTTAAGAAAGTAGTTTGTGTTTAATG
 TTTTGTAGCACAATTTTAAAAATAAAAAGACAGTGGTATTCTAATTTTCTTTCTTTTCTTAACTCAATTAGAATTTCT
 TAAATTTGGGGCATGTTCTTACATTTATAGGTAACAGTTCATTTATTATTTTGGAGACATAGAGCAATTTATAAGGAAAT
 TAAAGGGAACTCCCTTTAATTCATCTTCTTCTGATATTCAAGAACATAGACTGAGCTTCTCTATCTCTTTCAGT
 TCTAGTTTATATTTGCAAGGTGTGTCTGGGCCAGTCCAATCTTCTTCTCTACTGTTCTCATCTACCATATCAATTTAC
 ATTACAGATCACATGCCGAACCTTTAGGGGAGAGGACAAATTAAGTGGGATTAACAATGAAAGATATAGAAGTGTCTCAGGA
 TATTTTCTAGGTTTGGAGACTTGGAGAAAATGAATAAGTGAAATGTAGACATATATGAATGAATATATCAAAACATCAG
 AGGAGAAAATTTAGCTGTGTCCAGAGAGGACAGAGATGCTATCTTTCTATTGCTTGTGTTTTGAACTTCTTTCGTATTT
 TATTATTGTATTGTTAATAATCATTGAAGTAGTGTGAGAAATTTAGAGAAAGTAGAAGTAGAGCAGTTTCTCTGAAAAA
 CTTATAGATGGTGACAGATGACCACATAATTGTGTGACAGTAAATGTCTGATTGAGCTTCTGCTGTATTATAGAAAG
 AACATATGAATAGATAAAAGCACACAGTTTTCTTTTCACTATGTCTCAGGAGAAAAACAATGCACATCGGCATATATG
 GAAACAAATGAGATTAGTTAAAAGAAGGAATTTAAATTATGTAGACTAAGCCAGGGTAATGCTTACGAATGAGATGACT
 CATCTAATAAAAGCATCAAAGAGAAAAACTGTTGTTTTCAGTTAGATTGTTTCTTGGTCTGTTTTCTGAGATGATGAT
 GATGATGATGATGATGATGATGATAAATTGCTTTTAGGAAGGAGCTGCACACTACAAAATGCAACAGAGTTGAT
 AATGATAAGATTAGTTGAATTAAGTAATTCTAGACCCCAATTGATTATTTCAATTTCTAGGTCAATAGTGTAC
 CTTGTTGCAATGAAGTGGTTGTTGTAAGTCTACTATCTTATCAAAAGATTGTTCAAAAACATCTCCATGTACTA

125/375

AATACTATCAAGCAAAAATATATTGTGTATAGGGAAATACAGTATTTAAAAAATTGGTAGAATCTACAATGAACTCAA
ACAAATTTACAAGAAAAAACAAACAACCCCATCAAAAAGTGGGCGAAGGATATGAACAGACACTTCTCAAAAGAAGAC
ATTTATGTCAGCCAAAAACACATGAAAAATGCTCATCATCTGGCCGTCAGAGAAATGCAAATCAAAACCACAATGA
GATACCATCTCACACCAGTTAGAATGGCGATCATTAAAAAGTCAGGAAACAACAGGTGCTGGAGAGGATGTGGAGAAAT
AGGAACACTTTTACACTGTTGGTGGGACTATAAACTAGTTCAACCATTGTGGAAGTCAGTGTGGTGATTCTCAGGGAT
CTAGAACTAGAAATACCATTTGACCCTGCCATCCCATTACTGGGTATATACCCAAAGGATTATAAATCATGCTGCTATA
AAGACACACGCACACGTATGTTTATAGCTGCACTATTACAATAGCAAAGACTTGGAAACCAATGTAAATGTCCAACAAC
GATAGACTGGATTAAAGAAAATGTGGCACATATACACCATGGAATACTACGCAGCCATAAAACATGATGAGTTCATGTCC
TTTGTAGGGACATGGATGAAACGAAACCATCATTCTGAGCAAGCTATCGCAAGGACAAAAAACCAACACGCATATTCT
CACTCATAGGTGGGAATTGAACAATGAGAACAACATCTGGACACAGGAAGGGGAACATCACACTCTGGGTACTGTTGTGGGG
TCGGGGGAGCGGGGAGGGATAGCATTAGGAGATATACCTAATGCTAAATGATGAGTTAATGGGTACAGCATACCAGCAT
GGCACAATGTATACATATGTAACCTGACATTGTACACATGTACCCTAAACTTAGAGTATAATAATAATATGAT
AATAAATTGGTAACCTAGTTTAAAGGTCATGTAACCTACTCACACAAATAATACAATAAGATGTAATATAGAATGTGCAT
GTAAAACATAAATTTTATACATAAAATAAATAATAGATCATAGCCCTGATGCATGCGTGACAAAACACACACACACA
CACACACACGACACACACACTTGCCTATATTTGCAATAGCCTAGCTACTAAGGAATCTGATTAAACATAGATTCTATC
TTGCATATCCGATTTCTTAATAGCAGAATTAAGAGCTTCTTGGAAAGAAAAGGCTTATACTCAAAATCTGCTTTTCTGAA
TCCTTTTGAGTTGAGCACAAAAGGAAACCAAAAGACCCAGAATAGCAATGCAATGTGTGTATTGAAGGTTTGTAGG
AATTATTCACTATTGTATTTCTTTCTGTCTTACATTACAGCATAGGCTTTGCCTAGAGGCAAAAGAAATTAAGAATTAC
TTGCAGTTCCTACTCTTTTGCAGTCAAGGCAGTAATAGGGTGATGGATAAGGTGTATAGAACAGCAGTTCCTACCAAAT
GCCCTTGAAAAATCAAGCAAATAGATGGCTTCACATTTTATTATCTAACCCTGATATGGCCTGCATTTTACTTGGGAG
CAGAGATGCCAATATAACTGAAGGGTTTTGAAATGGCCCTTTGAGGAAAGGTGATGAGGTATCCATTGATTTAATCTAA
GAGGAGATGGAGAAATAATACAAGAGGGACTTGATTTACATGCAACTTGTTTAGGAGACCGCATCTCAACAGTTTTTG
AATGGCATATTTCTAGCTGTTTATGTGGCTTTATGCTGATAGTGTGAGTCAAATGAACAAGCTTGAAGTTTTTAATCAG
AAAATATTACATTTTATAAGTGAAGGGTGCAAAATAAGAAGATTGCAAGTAGCGCTGCCTGCACCTATCATTAATGC
TGTGTGGATTTTTTCTAATTGAAAACAGCACACAGAGAGCTCTGAGTATGAGATGTAGTTATACAAAAGGCATAAGA
TGCTAGACACCTTCAAATACTGGGTGTTCTCTTACTAGCCATGACCTTAAGCAATGTATTTAACCTATTCTTTGTT
CTCATTTTCTCATTTTATAAAATATGCACAATAAAACTTACCTTATAGTTTTGTTTTCAAATATAAAATGAATAAATATT
GTTAAATATTTCGAGCATTTCTTTGGGTACACAGTAAACCTCCGTAAGTATTAACCTTTTATGGATAAAAACCTTTTAAAA
AATGGAAATAGATTTATTATTTTATCTGATTATGAAAATTATATGTGATTATTATTTAAAAGATTTTAAAGAAAGATG
CAAAGAGAAAAAATTACTTAAATCAATTTGTCTCAGATAACTATAGTGAACATTTAGGTATCATAGTTCCAGGAAGA
CTTTTGTGTTCAAAGATGCATAATGTATACAATTGTGTCTATGGGCACATCTCTCGGGCCAATCTATGGCTGACCCCT
ACTCCATCCTACCCCTAAAGTAAACATGCATTTTGCCTGTATCACTGTCTGTCAAATCCATGCTCCTCAAAGGC
AGTATCTTCTGTAAACCTCAATCTTTTATTACTATCTAGATTCTCAGGCTTAATTTGTTCCAAATTTATGCCAGCCATC
ACCTCCATGCAAATCTCACTTACCTACCTCTTTATCCATCAAAAATAATCTATTAAATCAGTTTATACCTTACTTATTTA
GCACTTAAATATTTTAGACTTTGTGCTAAGTGCCTCACATATAGCATTTTACTCTTCCAGATAGCTTTCAAGGGAGCT
TTCATAACAACCATTTTAGCATTTGTTTCGATCTCATTTCTCAATCTCCATCTCTTCAAACCTATAAACTAAATTTCTCCC
TTGGCAAGGTTGGCCTACACCCAGGAACAAGCAAGGAAAGCCACCTCTGAGGCTAGAAGCAAGATGGAGTCAGCCATG
CTAGCCTTCTCTCATTTGTTATAATCTTTGCAAAGCTGGTTTCATATTTTACTAATCTTTCTCTGTTAAATGGACAAACA
TCCTTCTTGATGCTACTTTCACACACCTTTTCCAACCTCTCTGTACTTGACACAAATAGACAAAGCATTTGCTCAATAAA
TATTTATAAAGTTAAGAAAGAAATCACTTTATACCTAAGAGTGGATCCTAATGTTTACATAAATATATCTCTGATTGAG
GTTCTTCTCTTCTCCCCAATTACCAAATCTTTCTTTCTTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTT
CTTT
GATACATATACAGAACATGCAGTTTCTTACACAGTATATGT
CTGGGTTTTAAGCCCTGCATGCTTAGCTATTGTCTGT
CTGGT
TTGCTTTTCTGATCCTGT
CATTTCTATTGTGGCTGTATAGTATTCTATGGTGTATATGTACCACATTTTCTTTATCCAGTCTATCATTGATGGGCA
TTTGGGTTGGTTCTATGTCTTTGCTATTGTAAATAATGCTGCAATAAACATACATATGCACGTGTCTTTATAATAGAAT
TATTTATATCTCTTAGGTATTTACCCAGTAATGGGATTGCTGGGTCAAATGGTATTTCTGGTTCTAGATCCTTGAGGA
GTTGCCACACTGTCTTCCACAATGGTTGAACATAATTTACATTCCACCAACAATGAAAAAGTGTCTCTTTCTTCCACA
GCCTCTCTAGCATCTGTTGTTTTCATGACTTCTTTTTAATAAGCGCCATTCTGACTGGTGTGAGATGGTATCTCATTGTG
GTTTTGATTTGCATTTCTTTAATGATCAGTGATGTTGTGCTTTTTTTTTCATATGTTTGTGTGCCACATGAATGTCTTCT
TTTGAGAAGTGTCTGTTTCATGTTTTTGGCCACTTTTTAATGGGTTTTCTTGTGTTTTTCTTGTAAATATGGTTAAGTTC
CTTGTAATATATGGATGGTAGCCCTTTGTGATGAGGTAGATTGCAAAAATGTTCTCCCATTTCTGTAGATTGCCTGTTC
ACTCTGATGACAGTTTCTTTTGTGTGTGAGAAGCTCTTTAATTAGATCCCATTTGTCAATTTTAGCTTTTGTGTGAT
GCTTTTGGTGATTCATCATAAAATCTTTGCCCATGCCTATGTCGTGAATGGGATTGCCTAGGTTTTCTTCCAGGGTTT
TTATGGTTTTGGGTTTTACATTTAAGTCTTTAATCCATCTTGAGTTGATTTTTGTATAAGGTGTAAGGAAGGGGTCCAC
TTTCAGTCTTCTGCATATAGCTAGCCAGTTTTCCAGCATCATTTATTAACAGGGAATCCTTTCCCATTTGCTTGTGTT
TTGTCAAGTTTTGTTGAAGATCAGATGGTCTTATATCTGAGGTCTCTATTCTGTTCCACTGGTATATGTGTCTGTTTTGA
TACCTGTACCATGTTTTGGTTACTGTAGCCTTGCAATATAGTTTGAAGTCAGGTAGTGTGATGCCTCCAGCTTTATTCT

126/375

TTTTGCTTAGAATTGTTTTGGCTATACGGGCTCTTTTATGGCTCCATATGAATTTTAGAGTAGTTTTTTCTAATTC TG
TGAAGAAAAGTCAATGGTAGTTTTGATGAGAATAGCACTTAATCTATAAACTACTTTGGGCTGTATGGCCATTTTCATGAT
ATTGATTCTTCCATCCATGAGCATGGGATGTTTTCCATTTGTTTGTGTCTCTCTTATTTCTTTGAGCAGTGTTTG
TAGTTCTCCTTGAAGAGTCCCTTCATGTCCCTTGTTAGCTGTATTCTAGGTGTTTTATTCTCTTTGTAACAATTGTGA
ATGGGAGTTTCATTATGATTGGGCTCTCTGCTTGTCTATTGTTGGTGTAAAGAAATGCTTGTGATTTTCACACACTGAT
TTTGTATCCTGAGACTTTGCTGAAGTTGCTTATCAGCTTAAGGAGATTTGGGGCTGAGACAATGGGGTTTTCTAAATAT
AGGATCAAGTTGTCTGCAACAGAGACAATTTGACTTTCTCTTTTCTATTGTAATACGCTTTATTTCTTTCTCTTGCC
TGATTGCCCTGGCCAGAATCCAATACATATGTTGAATAGGAGTGGTGAGAGAGGGCATCCTTGTCTTTGGGCCAGTTTT
CAAAGGGAATGCTTCTCGCTTTTGGCCATTGAGTATGATATTGGCTGTGGGTTTGTGAGAAGTAGCTCTTATTACTTTG
GGAAATGTTCCATCAATATCTAGTTTATTGAGAGTTTTATCATGAAAGGATGTTGAATTTTGTGGAAGGCCTTTCTG
ATCTATCGAGATACCAATTACCAATTTCTAAGATTACATGGTGTCTGTCAGTGAATAGATCTATGCAAACTACCCCCA
AAGTTCAAGGAAGCTGAGAGGCTGAAGAGGCTGACATATCCAGCTTCTCAGGAAAAATGAAAAACAAAAACATTTAA
TAGCCAGGTCCCAGGTGGCTGCAAGAGGAGATGGTGGTTCAGTGCAGTGTAGCCCCAGACCTAGGAATTATTTGCTGT
AGTGAAGGAACATGTAGGACAGTTGAAATCAACTCCTCAGGGAAAGGCAAGCATGCTATGTAAATCTGCCTAAGGGAAG
GATTTATGGTTGAGGCTGTTTTGAACAAAGGGTAGAATTTATGGTAACAGTAGGTAAAGTATAAATCTTAGAGGCATTC
CTGGAATCGGGGTAAATCAGATGTGAGTATGGTGGAGTACAAATGAAGATGGAGTTGCTTTAGTCTCCACACATGGGAA
CAGATAGAAAAAGTGTCTTTATAACCAAAATGTTGGCTTTTACAAAGCTCTGCTGTAATTTCTAAATAGATGGAAGAGG
ATAAATCAAATAAGCTGAATTAACCTTAAAAATTCCTTTTTTAGAGTAACCTTCTCAAATTTAAAGAAATTTTATCAAAGT
AGTGTGGGCATATCTACTGGGGGATGGAGAAACATAGAGCAAGAGAGAGAGAACTTTGTGATGGAAATCAAGATTTTCT
TAAATCTCTCATAGAATAATTTATTAGAGTATTTATGAATTTTCTTCTCTTCTCAAATTATCTTCACTTGGGGTTATTT
TATCTTTATTTGTGTATCTTGGACTGTCTTTTTTCAAAGCAAGCTTCTTTAGATGCCTGATGAGCTATGATTATAATT
TTATTCAAGTTTAAAGGAATGAAAAGCTGATTGGGCTCTGACTTGCCTTTGCTTTGGAGTCATGGGGCTATGAATTAAC
AGTTTTCTGGGGGGGATCAGAACATGCCAGATGATGGAAGTCTTTTGTCTGGAGCTATTATTTTGATTTAGAAAGGTT
TTATTTTAGTGAAGTTATAAAGAACTCTCAAATATTTCTCTAAGCTGGAGAGGCCTGTCTCCTGGGTGTCTCTTTCT
GCAGGGTTGGATAGTGGCTATTTCTACCCATAGATACTTGTAAATTTGTGAGTTCCTCATGCTCCTGTACCTTTCTCT
GTCTTCATTGCATGTGGTGTTTTGGAAATCTTAGCCTTTCTGGAAAGGCAATTTCTCTCTCAGTCTGTCTATTTAT
ATCCCTTCTAGATAATCTAACCCTGTGGTTGACTGTATTTTCATGTGCTATCTCTTCTTTATCTGCTTTGTCTATCTACA
TCTGTTGACATATTTTGTATTCTCATGACTCTCTTTTCACTTCTTACTACCATTAGGGTTTTGTACTTTTCTCCCTTT
AGTGACATCTAAGATGGGAAAGATTGTAATAACATATGACCAGATTCATCAGGGAAATATATGCTATTCTAGGTAGTTC
ACACAAGATATTATGTAATACAGGTAATTAAGGTTACATGGTCACTCTGAGAACCTGGAGTTAGGTGATTAGAGAAG
TTGCTACTAGAATGCAAGAACTGGGAAGTGGAAAGATCAGACAGCTGCCAACAGTGTCTCTGGTGCCAACAGCTT
AAAACCTTAGTTCTCAGGAAAACTCCAGTGTGTTTTGGGTTTTGCCAATTACATTATATCATGTATCCACCATTACTGT
ATCATAAGAATGGAGAAATAACATGTTTATTGAATACAGACACACACACACACACACACACACACACACACATATA
TGCAATGCCAAAAAGATAGATAGAATCTTAATTTCAATGATGTTTCTAGTTTCCGTAAGAAGCTAGAAAGAATGGT
ATGGATATCAATTTTTCTGAATATATACATAAAGGTTGAAATTAATATAACTATTTCAGAATTTTAAACAAATGAATACT
GTGATATGGGATTTATTTTATTTTTTAAAAAATGAGGAAGATTTTCATGTTATGATGCTTTTCATACGGTATCTCTCGTA
TGAGTGACAATACTGCCTTTTAAATTTTTTCTCAAATGTTATAGGGCAACAGAGATTGGCAGTATGAGCTGTCTTTTT
ATTGTATTTTAAATGGTAACTTGTACATGATTATGGGGATATTTAACTTTTATGATTTTTTAAACAACTCTCAGTTCC
ATCCCATAAAAGAGCTTTATGTAGAAATACTTTTAGCAGCTTTTAAAGTTTATTTTCATCTTCTCTTCCCAGGAGACAAG
GTAAAGTAGAGATTACATTTTCTGGAGATATTACTTTCAATTTATATCTTTATAAATATGGATAGACAATTTTATAATA
ACAGTGCTAACACTGAAAAGGAAAAGAGTAAGATTTTGTAAATTTATAAATAATCCTTATGGGGATGTTATTATTTAACT
CTGAAGATGTTGTTTCACTTTTCAATTTTGGTTTCACTGCTTGCAGAAATAGTAATCTCTTAGCATATGAAGTC
AGCAGATCAAATGCAAGAAACAAAACAAAACAAAACAACTCAGAACAAATCAAGAAAGGCTCAAAGTTTAGCACACTATT
TATTTCACTGTTTTTAAATCATACTCAGGAAGGGTTTTAGTGAAGAAAACAGGAGTGAGATTAATCAAATAGCTCAAAT
GCTCAAACCTAAGTTATATATTCAGGAGGCTTTAAATTTCCACCATTTTAAAAAGTGTTCTTTAAACCTCAATTTCCG
GTACCTTGCTGTFCTTGGGTTTGAAGGATCAGTATTTTCTTGCCATTTATCACACTTAAACATAGAGCATCCAGA
ATCAATAAACTACAAAGCAGAAGATTTAGAGAATCTATCTTCCAGAATAATAGTCATACCTTTCCCAAACATGTTCTAT
ACAATTTTAGGGGACTATAGACCTTTGGTATATATATCAGATGTTAAGCTTTTGTTCATTAACTACTGTAGTCAG
TTGTAATGCTATGTTGTTAATCTAGAGACAGGAATATATACTTCTATTTCTTCAAATGAAAAATGGCTTTGGTCATA
AGTAACTATACCCAAATCTTATTTCAATATCTACATTAACAGCATGTTACAGATAGGAATCCAGTATTATATTTTAC
ATAAATTAGTTATTTATCTCGATATTTACAGAGTGTCTAGGCAATGTGCAAGTCAAATAATACATATTCACTGTCTCTCAA
AAACTCAACACTAGTCAATGGGAGACCAGCATCAAATAAAAAAATAAGAGCAATACAGTTTTCTATGTGCAAGACAGA
CACAGTTCTACAGGGCTGGGGACAGAAAGGCACTGAAGAGGAATGGAGAAAACCTTGGAGAGGAGG
TGTGGCTGGAGCTGAGTATTGAAATAGGAGAAATATTTGTTGAGATATTACTCTTTTTATTTTTTTCATGACTGAATTC
AGGCATACGTACCTTCAAATACCTTATTGCAGATGACCTAGAAGGCTGCATGTAAAGATAAATACATCCTAACATTTGT
ATATTGTTGCTTCTCAAATTTCAAACTGTGATTACTTGTGTGTTGGTTACTGATCTTTATTTTTCATTTACTTAGCAT
CTTCATTGATAATCCTGATTGATGTAGTTTACTTTTCATCATCTAAATATCTCTAGTTTCTAATTTATTTCTGTGTAGAG
ACTTTAGTTTTCATCAAATATAAGTGGGCATGAAATTTATATACCTGAGCCAATAGAAGAACTCAAGACTTTTATTTGCCT
TAATGTAGGATTTAAAAACCAATTTCAAACAAATTTGTTTATATATGTGGGAAAATTCCTTTAAGTTTCTGTTGATAGGT
ATTGGAATAGGTTTCTAGTAAGATATTAATGTGTCTATCCAAATAAATTTTATAGTTTACATAAACACTGATCTTGAAT

Fig. 6. [2.]

127/375

AAAATAGCTATAGTTCTACCTGGAGGTAGAGAGTCATAATAATATCAAATTAGAGCTCATGTTTGTGTGTGTATGTGTT
TGCATACCTTGTGCACGTGCTGGCTTTTATGTACAAAATGGTGATCATCAAAGGTAGTTGTTCATCAAAGGTGCATAGATT
ATAAAAGCTAAAAAGGACACTGTATTTTAAAGATACGGAAACCTAGGCCAGAAAAATTAGACAGGTTGCTTAAGACTG
AGAGCAGAGCCCAGAACTTGGGCCTCTTGACTTCCCTTTGCAAATATATCATTGTGCTTTGAAATTATAGATATACGGA
ATCATAGAACAGGAAGAACTGTATGATCATCCAGAGCTCATTGACAGCCCCCTCCCTCCCTCCACATATATGCTAATA
AACCCCTCTGCTGTCTCTCTTCCACTTAAATTTGCGGGGAAATCTAGTTAGCATAAAAACACTGATCCCTGTGGCTGGCT
ATGCTTTTTTTTTTGACAGATTGTCCTGCTACTGCTGCTTCCCGTCTTCCCTTCATCATTACATTATGACAGACATTTGA
GCAGAGTCTCAGTGAAACTTGTGTTGGGGGTTGGTGCTCTGATTCTCAGTGCAGCCTGCCAGCCTCATTTGGGAAAAGG
TGTTTAATATAGGCAGCGATTTTCTGTATTATGAAGTGAAGTGAAGTGTGACTCATACATATATTGGTATTT
ATATCTTACTTACAATGAAGAAATCAGGCAATTTTGGGGAGTAGAAGTGAAGTGTGACTCATACATATATTGGTATTT
TCTTTTATGAGATTTTGTATATGGCACTTAATGTTTTATGCTGAGAGGAGATGAAGATTTCTCATTTTCCCTACAATTTCA
CTGAGAAAATCATACAGCAAGGACACAGAACTTCATGCAACTGCCTTCTTTTATAGTACCTATATCTTGTCTTTCTTT
CCTTTCTTCCCTTCTTGTCTTCTCTTCCCTTTTGGTTTCTTTGTTAAGCCTTTTCTTCCCTCCCTTTATCCCTCCTT
ATAATTGATTTTGTCTTCTTGTGTTACTACTTTCTTCCATGGTTCTTCCAACCTGTAGTATGAAAGAGAGTGGATATG
GTAGTGGTTAAGAGCATAGGCTCTAAAGTCAGACTGCCTGGCTTGAATCCTCTCTACCACCTTACTGACTGAGTGACCT
TGGATTGAGTCACTGAACCTTCACTTTTCAATTTTATGTCTTATGGATAAGTTTCAATCAGAGTTGAGGATGAAGTG
AGATATATGAAAGTGCTTAGTACAAAGCACATGTGTGCTATCTTATAGTATGTCAGTACAGCTTTCATATATATATTA
CATTTATGGTTATTCCAATATATACATTTTGTGTAGAAGGCTTAGTCTTTCAATTACAATAAGCTATTGGTATAGTTTA
GCCATCTAATGCTAAGTGAAGGAGAATGGGCTCAATTTGTTCTAAACAAATTTTATACTTACTTATCTTGGGCTTTGA
AGAAAGGTATGAGGAAATTAACCACAGAGATGTGTGCACACCTAAGAGACATTGACCCCACTTACTTTCTTCTTCTGCT
CCTTGGCTAAGACTCCTATGTAAGTGCCATTGTTGCTAGAAGTTTGAAGCTTTTGTAGGTTTTAGTTTTGTGATTTTT
ATATCTTTTTTTCAGATATTTAATTAATTTAATATATATTTGCAATCTATAACACCATATAAATAATCATGATAAATCA
AAAGATATATTGTCTGGTCCCTGGTCTCTCGAGCTGCCAAGGCTCCTAGCTGCTGGGAAAGCTGATGTATATGCAACT
TGGAACATAAGGCAGTGTTTATTGATGCCATTGATCTTTGTAATGGGCTACATGATTGAACCTTTTTTTTTATTTCTTCT
CCTTAGTCTTTGATAATGACTTCACATCTGTAGTTATCTCTTATATTTTGTGAGTTGCTTTTTGTGCTGCCTGCAGTATT
CTAGACATTTTATAATTAGAGATAAAGCTTGAATTTCTTATGCAACATGTTTTGTATTTCAGCCTGCTTTCTTCTTCCC
ACAGTTTTTGGTCTGGTTTTGTTTATAGTTTGTTTTTCTGCAGGTAGAAATACCTAGGAAAGACAACATCATTTGATAAA
GTATAAAATATGCTTATTAGGAGAGAATACTTTAAAGGCTTATGAACCTCTTGATGACTATCCTTTAGTTTATAATTA
ACTTATTTTTTTTTTATTATACTTTAATTTCTGGGATACATGTGTAGAATGTGCAGGTTTGTACATAGGTATAAACATA
CCTTGGTGGTTTTGCCACACCAATCAACCCATCATCTACATTAGGTATTTCTCCTAATGCTATCCCTCCCTAGTCTCCA
CCCACCGACAGGCCCTGGTGTGTGATGTTCCCTCCCTGTGTCCATGTGTCTCATTGTTCAAATCCCACCTATGAGTG
AGAACATGCGGTGTTTTGGTTTTCTGTCTGTGTAGCTTGTCTGAGAATGATGGTTTTCCAGCTTCACCATGTCTCCCTGC
AAAGGACATGAACCTCATCCTTTTTATGGCTGCATAGTATCCCATGGTATGTATGCCACATTTTCTTAATCCAGTCTATC
GTTGATGGGCGTTTGGGTGGTTCCAAGTCTTTGCACTGTAAACAGTTCTGCAATAAACATACATGTGCATGTGTCTTT
ACAGTAGAATGATTATATTTCTTTGGGTATATATCCGGTAATGGGATTGCTGGGTCAAATGGTATATCTGGTTCTAGA
TCTTTGAGGAATTGCCACACTATCTTCCACAATGGTTGAACCTAATTTACACTCCCACCAACAGTGTAAGCAATTCCTT
TTTCTCCACGTCTCTCCAGCATCTGTTGTTTTCCAGACATTTTAATTTATCACCATTCTAAGTGGCATGAGATGGTATCT
CATTGTGGTTTTGATTGCAATTTGTCTAATGACCAGTGGTAATGAGCTTTGTTTATATGTTTGTGGCCGCATAAAAGT
CTTCTTTTGAGAAAGTGTCTGTTTCATATCCTTCGCCCACCTTTTGTATGGGTTTCTTTGTTTTTTTTCTTATAAATTTGTGT
AAGTTCCTTGTAGATTCTAGATGTTAGACCTTTGTGATGATGATAGATGGCAAAATGTTCCCTATTCTGTAGTTTGGC
TGTTCACTCTGATGATAGTTTCTTTCAGCTGTGAAGAAGCTCTTTGATTAGATTCCATTTGTCAATTTTGGCTTCTGTGG
CCATTGCTTTTGGTGTTTTAGTCATGAAGTCTTTGGCCAGGCCTATGTCCATAATAGTATTGCCTAGGTTTTCTTCTAG
GGTTTTTATGGTTTTAGGTCTTATGTTTTAAGTCTTTAATCCATCTTGAGTTAATTTTTGTATAAGTTGTAAGGAAGGGG
TCCAGTTTCAGTTTCTTGCATATGTTTAGCCAGTTTCCCCAACACCATTTATTAATAGGGAATCCTTTCCCATTGCT
TGTTTTTGTGAGTTTGTCAAAGATCAGATGTTTTTAGATGTGTGGCATTATTTCTGAGGTCTACATTCTGTTCCATTT
GTCTATATATCTGTTTTGGTACCAGTACCATGCTGTTTTGGTTACTGTAGCCTTGCAGTATAGTTTGAAGTACAGGTAGC
ATGATGCCCTCCAGCTTTGTTCTTTTTGCTTAGGATTGTCTTGGCAATGTGGGCTCTTTTTGTGGTTCTGTATGAAATTTA
AAGTAGCTTTTTCTAATCTGTGAAGAAAGTCAGTGGTAGCTTGTATGGGGATAGCATTGAATCTATAAATTACTTTGG
GTAGTATGGGCATTTTCATGATACTGATTTCTTTGAAGAGGTCTTTCACATCCTTTGTAAGTTGTATTCTTAGGTATTTT
ATTTCTTTGTAGCAATTTGTAATGGGAGTTTGTCTCATGATTTGGCTCTCTGTTTGTCTATTACTGATGTATAGGAATG
TTTGTGATTTTTCACACATTGATTTTGTATCTTGAGACTTTGCTGAAGTTGCTTATCAGCTTAAGGAGATTTGGGCCTGA
GACAAATGGGTTTTCTAAATATATGATCATGTCTGCAACAGAGACAATTTGACTTCTCTCTTTCTATCTGAATA
TCTTTTATTTCTGTTCTCTTGGCTGATTGCCCTGGCCAGAATTTCCAATACTGTGTTGAATAGGAGTGGTGAGAGAGGAC
ATCCTTGTCTTGTGCTGTTTTCAAAGAGAATGCGTCCAGCTTTTGGCCATTTGGTATGATATTGGCTGTGGGTTTGTCT
ATAAATAGCTCTTACTATTTTGTAGATATGTTTCATCAATACCTAGTGTATTGAGAGTTTTTAGCATGAAGGGGTGTTGA
ATTTTATCAAAGGCCCTTTTCTGCATCTATTGAGATAATCATGAGGTTTTTGTGATTGGTTCTGTTTATGTGATGGGTTA
TGTTTAATGATTTGCATATGTTGAACCAGCCTTGTATCCAGGGATGAAGCTGACCTGATCATGGTGCGTAAGCTTTTT
GATGTGCTGCTGGATTCTGTTTGCAGTATTTTATTGAAGATTTTTGCATAGATATTCATCAGGGATATCGGCCTGAAA
TTTTTTCGTTGTGTCTCTGCCAGGCTTTGGCTTCAGGATGATACTGGCTTCATAAAATGAGTTAGGGAGGACTCCCTCT

128/375

TTTTCTATTGATTGGAGTAGTTTCAGAAGGAATGGTACCAGCTCCTCTTTGTACCTCTGGTAGAATTTCAGTTGTGAATC
TGTCTGGTCCTGGGCCCTTTTATGATTGGTAAGCTATTAATTACTGCCTCAATTCAGAACTTTGTATTGGTCTATTTAGG
GATTCAATTTCTTCTGATTTAGTCTTGAAAGGGTGTATGTGTCCAGGAATTTATCCATTTCTTCTAGATTTTCTAGTT
TATTTGCATAGAGCTGTTTCATAGTATACTCTGATAGTAATTTGTATTTCTGCGGGATCAGTGGTGATATCCCCCTTTATC
ATTTTTTATTGTGTCTATTTGATTCTTCTCTCTTTTCTTCTTTATTAGTCTGGCTAGTGGTCTATCTATTTTGTAAATC
TTTTTTAAAAAAAACAGCTCCTGGATTCAATTGATTTTTTGAAGGGTTTTTCATGTCTCTATCTCCTTCAATTCGCTC
TGGTCTTAGTTGTTTCTTGTCTTCTGTTAGCTTTTGAATTTGTTTGGCTCTTGCTTCTTTAGTTCTTTTAATTTGTGACGT
TAGGGTGTGATTTTAGATCAATTCCTGCTTTCTCCTGTGGGCATTTGGTCTATAAAATTTCCCTGTAAACAGTACTTTA
GCTGTGTCCTAGAGATTCTGGTACATTGTAATCTTTGTTCTCACTGGTTTCAAAGAACTTATTTATTTCTACCTTAATTT
CATTATTTACCCAGTAGTCATTTCAGGAGCAGGTTATTTCAGTTTCCATGTAGTTGTGTGGTTTTGAGTGAGTTTCTTAAT
CCTGAGTTCTAAATTTGCTCTGTGGTCTGAGAGACTGTTTGTATGATTTCTGTTCTTTTGCAATTTGCTGAGGAGTGTTT
TACTTCCAATTATGTGGTCAATTTTAGAATCAGTGTGACAAGGTGCTAAGAAGAATGTATATCTGTGTGATTTTGGGTG
GAGAGTCTGTAGATGCCTATTAAGTCTGCTTGGTCCAGAGCTGAGATCAAGTCTGAATATCCTTGTAAATTTTCTGT
CTCAGTGATGTGTCTAATATTGACAGTGGGGTGTAAAGTCTCCCAATATTATTTGTGTGGGAGTCTAAAGTCTCTTTG
TAGTTCTCTACAACTTGCTTTATGAATCTGAGTACTCCTGTATTGGGTACAAATATATTTAGGATAGTTAGCTCTTCT
TGTTGCGTTGATCCCTTTTACCATTATGTAATGACCTTCTTTTGTCTTTTTTTTGATCTTTGTTGGTTTAAAGTCTGTTTTA
TCAGAAGTTAGGATGGCAACCTCTGCTTTTTTATTGCTTTTCCATTTGCTTGGTAAATATTCCTCCACCCCTTTGTTTT
GAGCCTATGTGTGTTGTTGCACGTGAGATTGGTCTCCTGAATACAGCACAAATGGATCTTGCTCTTTATCCAATTT
GCCAGTCTGTGTCTTTTAATTTGGGGCATTTATCCCATTTACATTTAAAGTTAATATTGTTATGTGTGAATTTGATCCTG
TCATTATGATGCTAGCTGGTTATTTTGGCCATTAGTTGATGCAGTTTCTTCATAGTGTGATGGTCTTTACAGTTTGGT
ATGTTTTTGCAGTGGCTGTTACTGGTTGTTCTTTCAAATTTAGTGCTTTCTTCAGGAGCTCTTGTAAGGCAGGCCTG
GTGGTGACAAATCTCTCAGGATTGGGTGTCTGTAAAGGATTTTATTTCTCCTTCACGTTTGAAGCTTAGTTTGGCTG
GATATGAAATCTGGGTTGAAAATCTTTTCTGGGGGAGGAGCCAAAGATGGCCGAATAGGAACAGCTCTGGTCTACAA
CTCCAGTGAGAGCGTCACAGAAGACGGGTGATTTCTGCATTTCCATCTGAGGTACTGGGTTTCTCTCACTAGGGAGTG
CCAGACAGTGGGCGCAGGTCACTGGGTGCATGCACCATGCGCGAGCCGAAGCAGGGTGAGGCATTGCCCTCACTCGGGAA
GCACAAGGGGTGAGGGAGTTCCCTTTCTAGTCAAAGAAAGGGGTGACAGACAGCACCGGGGAAAATTTGGGTCACTCCCA
CCTGAATACTGCGCTTTTCTGACGGCCTTAAAAAACGGCACCAGGAGATTATATCCTGCACCTGGCTTGGAGGGTCCCTA
CGCCAACAGAGTCTCGCTGATTGCTAGCACAGCAGTCTGAGATCAAATGCAAGGTGGCAGCGAGGCTGGGGGAGGGGC
GCCCACCATTTGCCAGGCTTGCTTACGTAAACAAAGCAGCCAGGAAGCTCAAACCTGGGTGGAGCCACCACAGCTCAAG
GAGGCCTGCCTGCCTCTGTAGGCTCCACCTCTGGGGGAGGGGCACAGACAAACAAAAAGACAGCAGTGACCTCTGCAGA
CTTAAATGTCCCTGTCTGACAGCTTTGAAGAGAGCAGTGCTTCTCCAGCATGCAGCTGGAGGTCTGAGAACGGGCAGA
CACCTCACACGGCTGGGTATCTCAACAGACCTGCAGCTGAGGTCCTGTCTGTTAGAAGGAAAACCTAACAAACAGAAAG
GACATCCACAGCAAAAAACCATCTGTACATCACCATCATCAAAGACCAATAGTAGATAAAACCACAAAAATGGGGAAAA
AACAGAGACAGAAAAACCTGGAACCTCTAAAAAGCAGAGTGCTCTCTCGTCCAAAGGAACGCAGTTCTCTACCAGCAAC
GGAACAGAGCTGGATGGAGAATGACTTTGATGAGCTGAGAGAAGAAGGCTTCAGACAATCAAATTACGCTGAGGTACTG
GAGGACATTCAAACCAAAGGTAAAGAAGTTGAAAACCTTTGAAAAAATTTGAGAAGAATGTATACTAGATAAACCATA
CAGAGAAGTGCTTAAAGGAGCTGATGGAGCTGAAAACCAAGGCTCGAGAATACATGAAGAATGCAGAAGCCTCAGGAG
CTGATGCAATCAACTGGAAGAAAAGGTATCAGCGATGGAAGATGAAATGAATGAATGAAGTGAGAAGGGAAGTTTGA
GAAAAAGAATAAAAAAGAAAAGGGCAAACCTCCAAGAAATATGGGACTATGTGAAAAGACCAAATCTATGTCTGATTG
GTGTACCTGAAAGTGACGGGGAGAATGGGACCAAGTTGGAACCACTCTGCAGGATATTATCCAGGAGAACTTCCCCAA
TGTAGCAAGGCAGGCCAAAATTCAGATTTCAGGAATACAGAGAATGCCAAAAAGATACTCCTCGAGAAGAGCAACTCCA
AGACACATAAATGTGATTCAGATTACCAAAGTTGAAATGAAGGAAAAATGTTAAGGGCAGCCAGAGAGAAAGTCTCGGTTA
CCCTCAAAGGGAAGCCCATCAGACTAACAGCGGATCTCTCAGCAGAACTCTACAAGCCAGAAGAGAGTGGGGCCCAAT
ATTCAACATTCTTAAAGAAAAGAATTTTCAACCCAGAATTTTATATCCAGCCAAACTAAGCTTCATAAGTGAAGGAGAA
ATAAAATCCTTTACAGACAAGCAAATGCTGAGAGATTTTGTCAACCCAGGCATGCCCTTAAAGAGCTCCTGAAGGAAG
CACTAAACATGGAGAGGAACAAATGGTACCAGCACTGCAAAATCATGCCAAATGTAAAGACCATCGAGACTAGGAAG
AACTGCATCGATTACAGAGCAAAATAGCCAGCTAACATCGTAATGACAGGACCAAATTCACACATAACAATATTAAT
TTAAATGTAAATGGACTAAATGCTCCAATTAAGACACAGACTGGCAAATTTGGATACAGAGTCAAGACCCATCAGTGT
GCTGTAATCAGGAAAAACCATCTCAGTGCAGAGACACATAGGCTCAAATAAAAGGATGGAGGAAGATCTACCAAGC
AAATGGAAAAACAAAAAGGCAGGGGTTGCAATCTAGTCTCTGATAAAACAGACTTTAAACCAACAAAGATCAAAGA
GACAAAGAAGGCCATTACATAATGGTAAAGGGATCAATTCAACAAGAAGAGCTAACTATCCTAAATATATATGCACCCA
ATACAGGAGCACCAGATGCATAAAGCAAGTCTGAGAGACCTACAAAGAGACTTAGACTCCACACATTAATAATGGG
AGACTTTAACACCCCACTGTCAACATTAGACAGAGCAACGAGACACAAAGTCAACAAGGATACCTTGAATTTGAAGTCA
GCTCTGCACCAAGCAGACCTAATAGACATCTACAGAACTCTCCACCCCAATCAACAGAATATACATTTTTTTTTCAGCAC
CACACCACACCTATTCCAAAATTTGACCACATACTTTGGAAGTAAAGCTCTCCTCAGCAAATGTAAACAGAAATTTATAAC
AACTATCTCTCAGACCACAGTGCAATCAAACCTAGAACTCAGGATTAAGAATCTCATTCAAACCGCTCAACTACATGG
AACTGAACAACCTGCTCCTGAATGACTACTGGGTACATAACGAAATGAAGGCAGAAATAAAGATGTTCTTTGAAACCA
ATGAGAACAAGACACAGCATACCAAGATCTCTGGGACGCATTCAAAGCAGTGTGTAGAGGGAAATTTATAGCACTAAA
TGCCCAACAGAGAAAGCAGGAAAGATCTAAAATGGACACCCTAACATCACAATTAAGAACTAGAAAAGCAAGAGCAA

129/375

ACACATTCAAAGCTAGCAGAAGGCAAGAAATACTAAAATCAGAGCAGAAGCTGAAGGAAATAGTGACACAAAAAACCC
TTCAAAAAATTAATGAATCCAGGAGCTGGTTTTTTGAAGGATCAACAAAATTGATAAACCGCTAGCAAGACTAATAAA
GAAAAAAGAGAGAATACTCAAATAGACGCAATAAAAAATGATAAAGGGGATATCACCACCAATCCGACAGAAATACAA
ACTACCATCAGAGAATACTCAAACACCTCTACGCAAAATAAACTAGAAAATCTAGAAGAAATGGATAAATTCCTGGACA
CACACACTCTCCCAAGACTAAACCAGGAAGAAGTTGAATCTCTGAATAGACCAATAACAGGCTCTGAAATTGAGGCAAT
AATTAATAGCTTACCAACCAAAAAAGAGTCCAGGACCAGATGGATTACAGCCGAATTCTACCAGAGGTACAAGGAGGAG
CTGGTACCATTCTCTTCTGAAACTATTCCAATCAATAGAAAAAGAGGGAATCCTCTCTAACTCATTGTGAGGCCAGCA
TCATCCTGATACCAAAGCCAGGCAGAGACACAACCAAAAAAGAGAATTTTAGACCAATATCCTTGATGAACATTGATGC
AAAAATCCTCAATAAAATACTGGCAAACCAAAATCCAGCAGCACATCAAAAAGCTTATCCACCATGATCAAGTGGGCCTC
ATCCCTGGGATGCAAGGCTGGTTCAATATACGCAAAATCAATAAATGTAATCCAGCATATAAACAGAACCAAGACAAAA
ACCACATGATTATCTCAATAGATGCAGAAAAGGCCTTTGACAAAATTCACCAATGCTTCATGCTAAAAACTCTCAATAA
ATTAGGTATTGATGGGATGTATTTCAAAATAATAAGAGCTATCTATGACAAAACCCACAGCCAATATCATACTGAATGGG
CAAAAACCTGGAAGCATTCCCTTTGAAAACCTGGCACAGACAGGGATGCCTTCTCTACCCCTCTATTCAACATAGTGT
TGGAAGTTC TGACCAGAGCAATTAGGCAGGAGAAGGAAATAAAGGGTATTCAATTAGGAAAAGAGGAAGTCAAATTGTC
CCTGTTTGCAGACGACATGATTGTATATCTAGAAAACCCCAATGTCTCAGCCCAAATCTCCTTAAGCTGATAAGCAAC
TTCAGCAAATTCCTCAGGATACAAAATCAATGTACAAAATCACAAGCGTCTTATACACCAACAACAGACAAACAGAGA
GCCAAATCATGAGTGAAC'TACCATTCACAATTGCTTCAAAGAGAATAAAAATACCTAGGAATCCAAC'TAACAAAGGGATG
TGAAGGACCTCTTCAAGGAGAACTACAAACCACTGCTCAAGGAAATAAAAAGAGGATACAAACAAATGGAAGAATATTCC
ATGCTCATGGGTAGGAAGAATCAATATCGTGAATGGCCATACTGCCCAAGGTAA'TTAAAGATTGAGTGCCATCCCC
ATCAAGCTACCAATGACTTTCTTCAAGAAATTGGAIAAAAAAACTACTTTFAAAGCTCATATGGAACCATAAAAAGAGCCCG
CATCACCAGTCAATCCTAAGCCAAAAGACAAAGCTGGAGGCATCACACTACTTGACTTCAAAC'TATACTACAAGGCT
ACAGTAATGAAAACAGCATGGTACTGGTACCAAACAGACATATAGATCAATGGAACAGAACAGAGCCCTCAGAAATAA
TGCTGCATATCTCAACTATCTGATCTTTGTCAAACCTGAGAAAAACAAGCAATGGGGAGAGGATTCCCTATTTAATAA
ATGGTGCTGGGAAAACCTGGCTAGCCATATGTAGAAAGCTGAAACTGGATCCCTTCTTACACCTTATACAAAATCAAT
TCAAGATGGATTAAAGACTTAAATGTTAGACCTAAACCATAAAAACCTTAGGAGAAAACCTAGGCATTACCATTCAAG
ACATAGGCATGGGCAAGGACTTCATGTCTAAACACCAAAAGCCATGGCAACCAAGCCAAAATTGACAAATAGGATCT
AATTAACCTAAAGAGCTTCTGCACAGCAAAGAACTACCATCAGAGTGAACAGGCAACCTACAAAATGGGAGAAAAATT
TTCACAACCTACTCATCTGACAAAGGGCTAATATCCAGAATCTACAATGAACCTCAAACAAATTTACAAGAAAAAAACAA
ACAACCCCATCAAAAAGTGGGTGGACATGAACAGACACTTCTCAAAAGATGACATTTATGCAGCCAAAAAACACATGAA
AAAATGCTCACCATCACTGGCCATCAGAGAAATGCAAATCAAACCACAATGAGATACCATCTCACACCAGTTAGAATG
GTGATCATTAAAAAGTCAGGAAACAACAGGTGCTGGAGAGGATGTGGATAAATAGGAACACTTTCACACTGTTGGTGGG
ACTGTAAACTAGTTCAACCATTGTGGAAGTCAGTGTGGCGATTCTCAGGGATCTAGAACTAGAAATACCATTTGACCC
AGCCATGCCATTACTGGGTATATACCCAAAGGACTATAAATCATGCTGCTATAAAGACACATGCACAGTATGTTTAT
GTGGCATTATTACAAATAGCAAAGACTTGGAACCAACCCAAATGTCCATCAATGATAGACTGGATTAAAGAAATGTGGC
ACATATACACCATGCAATACTATGCGGCCATAAAACATGATGAGTTGATGCTCTTTGTAGGGACATGGATGAAATTGGA
AATCATCATTCTCAGTAAACTATCGCAAGAACAAAAACAACACCCGCATATTTCTACTCATAGGTGGGAATTGAACA
ATGAGAACACATGGACACAGGAAGGGGAATATCACACTCTGGGACTATTGTGGGTGGGGGTAGGGGGGAGGGATAGC
AATGGGAGATATAGCTAATGTAGATGACGAGTTAGTGGGTGCAGCACACCAGCATGGGCACATGTATACATATGTAAC
AACCTGGCGCATGTGTCACATGTACCCTAAACCTTAAAGTATAATATAAAAAAAAAGGAAAAACTAGAGTATAAATGAAG
TGCTCAAAGATGTTAAGAAAACAGGATCTTTTAAAAAATTGTTTTTAATTATTATGGGTACATAATAAGTGTATATCTA
TGGGATACATGTGAAATTTTGATACATACAATATATAATAATCTTATTGGGGCAATTGGGGGTGTCCATCACCTCAGGCA
TTTATCATGTCTTGTATTAGAAACAGTCCAATTCTCCTCTTTTAGCTATTTGAAAATATACAATAAATTATTGTTGAGT
ATAAAAAAAAAGTCCACACCTAGTCATATTATGTTCAAATCACAGAAAAC'TAAAGACAACCAGAAAAACATGAAAGAAGC
TACAGAAGAGAAGAAATTTACCTAAGGAGGGACAAGGATAAGAATTACATCAGAAATCTCATTTGSCAACCCATGCAAGAA
AGAAGAAGGTAGCGTGAAATATTTAAAGTGT'TAAAGGATAAAACTAGAATTCTGGATACAGTGAAACTATCCTTCAAA
AGCAAAGAAGAAATGCTTTCTCAGACAAAGGCTGAATCTGTCCACAGTAGACCTGCCTTGAAATAAATGTTGAAAGAAA
TTTTTCGGTCAGAAATGAAATGACATAGGTCAAAAACCTGAAATCTACGTAAAGAAAAGAGAGCTTCAAGAAGGAACA
AATGAGCATAAAATAAACTCTTTAATATTCTTAACTTAAAAAAGAAATTCCTTCCCTTAAAGAGTGGGCC
CCTCTCTTTCTGTCTTGTAGGGTTTCTGCAGAGAGATCCACTGTTAGTCTGATGTGCTTCCCTTTGTGAGTAACTGA
GCTTTCTCTCTGGCTGTCTTAAACATTTTTTCTCCTCATTTGACCTTGGTGAATCTGATGATTATGTGCTCTGGGGTTG
CTCTTCTCGAGGAGTATCTTTGTGGTGTCTCTGTATTTCTGAATTTGAATGTTGGCCTGTCTGTCTGGGTGGGGAT
ATTCTACTGGATAATATCCTGAAGGGTGT'TTCCAACCTTGGGTTCCATTCTCCCATCACTTTGAGGTACACCAATCAAAC
GTAAGTTTGT'TTTTTCACATAGTCCCATTCTCAATCTCTGATATCCTTTCTTCTGCTTGATCAATTTGGCTATTGATA
CTTGTGTATGCTTACGGAAGTTCTGTGCTGGGTTTTTTCAGCTCCATCAGGTCGTTTATATTCTTCTCTAACTGATTA
TTCTAGTTAGCTCAATTCCTCTCACCTTTTTTTCAGTGTCTTCTAGCTTCTCTGCATTGGGTAGAACATGCTTCTTTAGCTC
GGAGCCATTTGTGTTTACCCACATTTTGAAGTCTACTTCTGTCAATTTGTCAAATTCATTCTCCATCCAGTTTTGTTC
CTTGCTGGTGAGGAGTTGTGATCCTTTGGAGAAGAGGCATTCTGATTTTTGTAATTTTAAAGACTTTTTTGCACTGGTTCC
TCCCCATCTTCATGGATTTATCTACCTTTGGTCTTTGATGTTGGTGACCTTGGATGGGGTTTCTGACTGGACATCCTT
TTTGTGACGTTGATGCTACTCCTTTCTGTTTGTAGTTTTCTTCTAACAGTCAGGCCTCTCTGCTGCAGGTCTGCTG

130/375

GAGTTTGCCTGGATGTCCACTCCAGACCCCTCTTTGCTGGGTATCACCAGCAGAGGCTGTAGAACAGCAAAGATTGCTGC
CTGTTCTTTTCTCTGGAAGGTTTTTCCCAGAGGGGCACCCACCAGATGCCAGCTGGATCTCTCCTGTATGAGGTGTCTG
TCGACCCCTGCTGGGAAGTATCTCCAGTCAGGAGGCACGGGGGTGAGGGACCCATTTGAGGAAGCATTGTGTCCCTTA
GCAGAGCTCAAGCACTGCGCTGGGAGATCCACTGCTCTCTTCAGAGCCAGCAGGCAGGAATGTTTGTCTGCTGAAGCAG
CGCCTACAGGCACCTCTTCCCCAGGTGCTCTGTCCAGGGAGATGGGAATTTTATCTATAAGCCCTGACTGGGGCTG
CTGCCTTTCTTTTCAAGTGGCCTGCCAGAGAGGAGGAATCTAGGAAGGCAGTCTGGCTACAGTGGCTTTGTGGAGCT
GAGCCAGTTTGAACCTTCTGGTGGCTTTGTTTACACTGTGAGGAGAAAACCGCTACTGAAGCCTCAGTAATAGCAGA
CACCCCTCCCCTCACCAGCTCAAGTGTCCAGGTCCACTTCAGACTGCTGTGCTGGCAACAAGAAATTTAAACTAGTG
GATCTTAGCTTGGCTGGGCTCCACAGGGGTGGGATCCGCTGAGCTAGACCCTTGGCTCCTTGGTTTCAGCCCCCTTTCC
ACAGTTGTGAATGGTTCTGTCTCACTGGCCTTCCAGGTGCCACTGTGGTATGAAAAAAAAAAAAATCCTGCAGCTAGC
TCGGTGTCTGCCCCAACAGCCACCCAGTTGTGTGCTTAAACCCAGGATCCTGGTGGTGTAGGAACCCAGGGAATCTC
CTGGTCTGCAGGTTGCAAAGACTGTGGGAAATGTGTAGTATCTGGGCCGGAATGCACCATTCTCACAGCACAGTCCCT
CATGGCTTCCCTTGGCTAGAGGAGGGAGTTCCCCAACCCCTTGAACCTCCAGGTGAGTTGATGCCAACCCCTGCTTCA
GCTCACACGCCGTGGTCTGTACCCACTGTCTAACAGTCCCAATGAGATGAGCTGGGTATCTCCGTTAGAAATGCAGAA
ATCACCTGCCTTCTGCATTGGTCTCGCTGGGAGCTGCAGACCGGAGCTGTTCTATTTCGGCCATCTTGCAGCCAGCCA
CTGTAATTCACCTATTTTCAAATGTTACCATTAGAAGTGTATACCATATTACAAGTTTCAAACACTATCCTGCCAGGGC
ACAAAAGAGTTCTAGTTGCCTTAAAGAATTAGCTATTGTTTTCATCTGTGTGGCTTCGTCTCAGAGGGGTGATTGAAA
CATGACAAGAAGTGATTTTTTTTTTCTCAAGAGAAATGAGGAGCTTTGGACATTAGTGTCTAGCAATGTCTAGTAACA
TACATAGAGAATTCTATGAAGAAATCAGCCCAAGCCGTGACTATCGACCAAAATTTCAACTTTCAACAATGAGATGAAT
ATACTATCTATATATCTAATAATCCAAAGCTTCATTTATGAACATATTGCTTCTCAAATAAAAAATTTGGAGCAGTTTG
TGATTTAATGATGGAAATTTTTTATAAGAACTATAATGGCAGTTAAATTATAAACTGAAGTTACTAATATGAATCAGT
GAGCCTTTTCATGAGCTTTTATTTTAAACCAGCTAAAATACTAAATACTTTTATTTTAAATCAGCTAAAGCATTCAACTTA
TAGTGAGGAGAGTTTTGTTTTCAACACAGTTACGAAAGAATTCGGGCTCACTTAATTGTAAATAAAAAATCTTAAAGAAG
AAACCATTGTTTAAATGTTACCTCATTGAGTTTTTTCAGTAAATGGAACAAGAATTAACATTTAGGGTAATAATAGTTT
ATGTCTGTTTTTAATTATCGGACAGAATACTTAGGGAATGGACAGAGGCAGTAAAGAAAAATAGTTTATTATATTATAA
TGTATCATTAGTTTTGAATGTGCATACACCTAATATTAACCTGTATGTATAGTACACAATTGGTCATTTTTATTTTTAAAA
TATTACCTCATATCAATAATCCTAATTTAAATGGTTAAGAACATGGAATAATTTCCATGAAGTATGCATTTCTGAGTA
ATGGTTGTATATAACCAAAATGAAAGCTAATTAATTCATTTGGTGAAAGTTATAGTGAGATAAAGCACAGACTGTAGAC
ATATAACAATTAATTAGGACAATGTTATTTACATCTACAGGTGGAATTTCCACCAACCTGGAGGCTCATCAGCATT
TACCTTTTATTCAAAGGGGAAATTTGGTGAGAGAGTAGAGGCAGATAATCACAGCATCCCACTCTACTAGAAAAGCAAGC
CACAGCTCCCATCCTGCTGGTGATGTGACAGCACTGGTCTTTCTACACAGCAGCACACTAGTACCAAAAAAGAGGCTTT
GCTTTTTCTGTGTGATGAGCTGTAAACCTTCATATTAGAAAACTCAGAAAAAGAATTTTGCTTAGACGCTAATCAATA
CAAAAAATTGTGGCTGATGGAACTACACATAGATAAAATAGTCCCAATTTCTTCTACTTGTGAATTTAAATAACTTCA
TCTTAAGAAATAAAGGTAATTGGGAAAATGAAAAGGAAGTGTTCAGTTTTGATAGAGTGAATGGGGCATTCAAAAT
ATATTTCTAAATGAATGATAAAAAATAAATACTTGCAATATTATCAGAATTTATTTCCACAATAAATATGTTTCAGGAAT
GTTAAGTGGGGAAGCCTGGGCAGCCATTGTGCTGTAACCTGGCTCTGTTTATTTTTTGGCTCTTCAAAGAGAAAGAAAGG
AACCTTAGCACAATAGCAGAATTTCCCTGATGGTGGCTATTACAATTTTACCCTGAGGAAAGGACATCTATGGGTCTTT
GAAAAGCTAGGAAACATCTTGAATATCAGAAATTGTAATGAATACTACTTGGTGTAGATTAACTAAAGACATGGGAT
TATATGGTCTCAAAGCCACAGATGTAGTTGGGTCTAAGAACCCTGTCTATATATCTATATTTTTTATTTTTTTTATT
TTTTTCTTTTTATTATTATTATAGTTTAAAGTTTTAGGGTACATGTGCACAATGTGCAGGTTAGTTACATGTGTATACAT
GTGCCATGCTGGTGTGCTGCACCCATTAACTTGTCTATTAGCATTAGGTATATCTCCTAAAGCTATCCCTCCCCCTCC
CACCACCACCAACAGTCCCAAGTGTGTGATGTTCCCTTCTGTGTCCATGTCTCATTGTTCAATTTCCACCTAT
GAGTGAGAATATGTGGTGTGTTGGTTTTTGTCTTGTGTAGTTTACTGAGAATGATGATTTCCAATTTTCATCCATGTC
CCTACAAAGGACATGAACCTATTTTTTTATGGCTGCATAGTATTGCATGGTGTATATGTGCCACATTTTCTTAATCCAG
TCTATCATTCTTGGACATTTGGGTTGGTTCCAAGTCTTTGCTATTGTGAATAGTGCCACAATAAAACATACATGTGCAT
GTGTCTTTATAGCAGCATGATTTATAGTCCCTTTGGGTATATACCCAGTAATGGCATGGCTGGGTCAAATGGTATTCTC
AGTTCTAGATCCCTGAGGAATCGCCACACTGACTTCCACAATGGTTGAACTAGTTTACAGTCCCACCAACAGTGTAAAA
GTGTTCTTATTTCTCCACATCCTCTCCAGCACCTGTTGTTTCTGACTTTTTAATGATCACCATTCTAAGTGTGTGAG
ATGGTATCTCATTGTGGTTTTGATTTGCATTTCTCTGATGGCCAGTGTGGTGAGCATTTTTCATGTGTTTTTGGCT
GCATAAATGTCTTCTTTTGAGAAGTGTCTGTTCTATGCTTCACTCACTTTTGTGATGGGGTTGTTTGTTTTTTCTTGT
AAATTTGTTTAAAGTTCAATTGTAGATTCTGGATATTAGCCCTTTGTGATGAGTAGGTTGCGACAATTTTCTCCATTT
TGTAGGTTGCCTGTTCACTCTGATGGTAGTTTCTTTTGTCTGTGTATATGGAACTAAAAAAGAGCCTGCATAAGCCAAAA
GAACAAAGCTGGAGCATCACTACCTGACTTCAAACATACTACAAGGCTACAGTAACCAAAACAGCATGGTACTGG
TACCAAAAACAGAGATATAGATCAATGGAACAGAACAGAGCCCTCAGAAATAACGCCGATATCTACAACATCTGATCT
TTGACGAACCTGAGAAAAAGAAGCAATGGGGAAAGGATTCCTATTTAATAAATGGTGTGGGAAAACCTGGCTAGCCAT
ATGTAGAAAGCTGAACTGGATCCCTTCTTACACCTTATACAAAAATCAATTCAAGATGGATTACAGACTTAAACATT
AGACCTAAAACCGTAAAAACCTAGAAGAAAACCTAGACATTACCATTCAGGACATAGGCAATGGGCAAGGACTTCATGT
CTAAAACACCAAAAGCAATGGCAACCAAGCCAAAATGACAAATAGGATCTAATTAACCTAAAGAGCTTCTGCACAGC
AAAAGAACTACCATCAGAGTGAACAGGCAACCTACAAAATGGGAGAAAAATTTTCGCGACCTACTCATCTATATTTTTT
AATGGATTTAACAGCAAGAAAGACCATGGAGCCACCTAAATTTTTCCAAAATCTGCAAAATGAAGGTGATATAAATAT

131/375

GTCACCTTAGACAATATTTTCATTTTTGATATAAAAATTTTATTTTTTATCAGTTTGATAATATGCATAGGACTAAAAAATG
CAGTTGTCTTAAATATTTTAGGGTTGCTTAGGAAATCACTTTAAAAATAAAAAAGTGTGAGAATAAAAGTTGTCTGCTT
ATGTTCCATATTTTCAAGACTACCTTTGATTCTTTAGCTTAAACAAATTTGCACATAAAATAGGTTAGGAATTTATAGACTT
TCAGATGTGCTACCTGTCTCCCTTCAAAACACTCATTTAGGTAATGTATTAATTTATTTTGAATCACCTGTCTCTCT
GCTTCAGCAAAAACCCACCAGGGCAGAGATCACTCTCCCTCTTGTGCTTTGAATTTTTATGACTTAGCACAGTGAT
TGGCACATAAACATTATTAATAACCAATGAATGAGGAAAGCAACGAATAAGTAAACAAATGGGCCAGACTAAAAAGTAA
GTTATATGTATTAGTGAGAGTCAATAATAAATTAATGAAATAATCTTTTATTTGAAACTGAAGCAAATTAAGGGAAAT
TATGAACCTTAAATCTTTTTGTAAAGATCTAGTACCAATAAGATAAAAAAATGCTCATCTTTTTTCCATTGAAATGT
TATGTTCAAATGAGCTTTGTTTCTATACTTTATACATCAATTAAGCTGAATTCATAGGTGCTAAGCATTTTAACATATT
GTATTGCATGTAATATTCCCTAATGCCCCAACTTCAAGATTATATAATGGCTTACTCTCTCCCTGTCCCTACCCACCA
GATAGTGTTATCCACATACATTCTCATCTAGTTTTGTTCTGTGTGATGAAAAACCATATGGGTATCCTATTCCCTATGTGAA
TTAACCTGGCATGCAGGTAAGTGAAGTGCATGTGATCTGGTCTCTGCTGACATATCACAATGGGCCCCCCCTCCTTGCAT
GGAGGTAGCGTTTTTTATAAGACAAAATGTTTTTAAATAGAACACATTTTCAGATTTTCAGATTTTATATGTATTTTGTGT
TTTTCTCCCTCTACCCCTTTTCCAAAATTAATGAATGAAATTTCTAGGACCATTTTATAGACAAAGCACAGTTTAGTCCGAG
TAAACCAATGGACCCTGAAGTGTCCAAGTCAGAGTTTATTTGCAGAATTTAATTCATTCCCACAGAGATAGGCAACCCA
GGCCTGTGAGGACACGAGGGTAACTAGGCAACAAAGTGCCGTAGTCAGGCTTGTGTTTGCCTTTTTGGTAAGAGGACAAC
ATTGACTTCAGTGTGAGGACATAAAGGAGACTCAGGACTTATTAATTTTTTCCCCATAATTCGTGAACTTTGTGAAT
TCCCTAATATTCTTTTAAACAAGAGTTCGGAGACATGAGTTTATGTGCTTCTTGGATATATTACAGGGAGTTTGAGAG
AAGTTGAATAAATTATAGGTTAATGGCTGTGTAAATTCACCAACACCTTTTCACTATCTCATCAATCATCTGCTTTT
GAGTTATTGTGATTCACTCTGCTGATGAGCTCACACCTTTTTTCTTGATACAGGAATTTATGTACACCAGGGGAGTGG
ATTTTAAACAAAACGTATTCTTTAGAATAAATTTGAACAATGGATTGGTGGGTCCTTACACTATTATGTGCTGTGTAGCT
GTACAAGTGTGTCTGCATGAGCTTTAGGACATTATTTGAGATATTTTAAAGCTATGTGTACCTCATGAACTTGTAGCTGA
TTTTCTTAGTTCTTTTAAATATTTTCTCAGAAAACCAACAGTAAATCTATCAGGTTTACATGAATACACTCATTTG
TGTCATATCAACCCAAATGAATATGATCTTCCAGGTAATGATGAAGGATGATAACTATAATTTTCCAGCCAACTTT
ATTTTGAACATCACTCAGTGTTCACATGTTTAGTGGCTGTAAATCTATATGTCTAAGCAAACGTGTGAAGAGCATA
ATTAACCTATTGTTGTTGTTGTATCTTTTAAATCACAGTTTGAATCTGCTGGGAATGTTATAGTGGCAGTAGTAGCA
AAGGAATGGCAAGGATGTTAAGACTTTCTCATGCTAAGACCCAGCTTGGTATTGAGTTTTTAGGAGGGGCCCGCATGA
CATCTCTAATTGCTTTGGCAATCCAATTATTGAGACAAGTAAGTGAAGCCCATCGGGTGCCTCCCAAGGAATTAACCTGG
TCATTTGATATAATGTTGCACTCTCCCTATTTGGGAGGAGGGGTGGCCACCCCTCACCTCTGCCATTGAAGATTAACCCA
CTACAAATTTTCAAAAATATAATATCTAATTTATTACACAGACTATCATATGGGTTTCATAATCCTTAAGTATCTCTAA
ATTTTATTATTATTTTAGATTTTTTAAATAAGACTCCACCTAACCTTGATGGAAGGAAAGGGGGTCTAGAAGCATAACAGA
GTTTGGCTCTTGGTTCTCAGAGTGAAGTCTGCGCATGTGAACATGGGCAAGTTATTTAATCTTTGAGCCTTTTGAATTTT
AATCTGTAAACAGAGACAAAATGCCTTCTCAGAGGGTGAAAATAAGGATTAAGTACAATAATGAATGCAAAATACC
TGGCAGAGGACCTACCTTGATGTGCTATTCTCAACATGATATTTAATCAGTATACACAAGTATGCCCTTTTTTTTTTT
TTTGAGAGCGAGTCTCGCTCTGTTGCCAGGCTGGTGTGCACTGGCGCCATTTCAACTCACTGCCACCTCCCGCTCCCTG
GGTTCAAGCAATTTCTCCTGCTCAGCTCCCGAGCTGGGACTACAGGCATACGCTCACCATGCCCGCTAAATTTTTTG
TATTTTTAATAGAGACTGGGTTTCGCCATGTTGGCCAGGCTGGTCTCGAACTCCTGACTTTCAGGTGATCCTCCCGCTC
AGCCTCCCAAAGTGTGGGATTACAGGTGTGAGCCACCGCACCCTGCTGCATGCACATTTTGCTGGATGATCTTCCAG
GCTACCATGTGGATCTCTCTCATACAGCAGAGGGAGAGTTGTACAGCAATGAGGGCTTCAGAAGTGTGTCTGACCCATG
CTGATTGCTCAGTGCCCTGAGCACAAGTTTTTAAACATTTTGAATCTCACCCATAATATTTCTCATCTTGCAGAGACA
GAGAGCATTGTGGCTATATAATGCAGGTAAAGTACCTAGTGTAAAGAAATACATGCGGAAATGATAAATATCATAAGTT
GTATTACTGCCTGTGGTAGTCTGAATAATGGTCTCAAAGATATCCAAGTCTTAATTTCCATAACCTGTGAATATGTA
ACCTTATATGTCAAAGGAACTTTGCAGATGTGGTTAATTTAAGGATCTTGAGATGGGGGGATTTCTCTTGATGATCCA
GGCAGGCCCTAAATGTAATTATAAAGGGGCTTTTAAAGAGAGAGGCAGGAAGGTCAAAGGCAGAAGAAGGCAATGTGAC
AGCAGAAGTAGAAATTTGGTGTGAAGCCGCAAGCCAGGCATGCAATGCTGAAAGCCTCTAGAAGCTGGAAGAAGAAAGG
GATGAATCCCCCATTTGGCATCTCCAGAAGCAATTAATCCCACTGACATCCTGATTTTAGCTTAGCTCTGTAAGACTAAT
TCAGGACTTCTGACTTATTTGTGGTGTTTTTAAACCACTCAGTTTGTGTTAATTTGTTGTAAGGGCAATGGGAAATGAAT
GCACTTCCCATCCATAACCTGTCTCTAGCTATGTTGAAGTCTTTACCATCCCCAAATCTGACTTTTACTTGCATGCT
TCTTGCCTTTACATATCTGCTTTTCTTCTCTGCTTCTTCTATCTCCACATCATTGCTTTTCTCAACCTTCTCTACT
CAGCAAATTTCTGCTTATCTCTGAGAGGGAGGACAAGATCATCTCAGATATAGTTTGCTAGCTAAGAAAAGAGTCTCTG
AGACTGCTTTGAAATCTTGTGGTCTTTATCCATAGCTCATGTAATAAATCACTGAGCTAGCATGATATATTATTTTAT
TTTCACTCTGGAACATATGCTCTTAGCAATATTTTATTTGAGAAAAAATGAGAGCAAACTCTGTGTTTCCACATGCCCTA
TTGCCAAATTTCTCTGGGTGCTTTACTTTCACTGCACTGATTTCTAGAAATTTGATTGACAACCTGTGTTCTAAGATGACC
CTTTGATTTCATCCAGATGGTGTGAAAAATGTTTCTTCAAAAACCCACACTGCTTTTCAACATCCTAATGGGTAGAAT
CTCTAAATCCTTAGGGTGTCAACAAAAGCAAGGGCATATTTACACTTCAGTTGGGTGAAATTAATTAGCATGGAAGTT
AATATTTACAATTAATGGAGATTACCTGACTTTAATAGTGAGATTGTGTAGCTACTTTGTATCACTCACTCTTTTTTTG
TTGTTGTTTTAGAAATTTGTGGCAAAAATGGATAAAAATAAAATTCACCTTTTAAACATTTTTTGAATTTCTGGAGTG
TAAAGTGGTAGGATAACCAAAACATCTCTTTCTTGTGAAACCATCAACAAATGTCTTTTGAAGAGAGTTTGAATAT
CTTTTCTTTGAAATCCTCGTGCAAACTTCACACCATGATCATTTATGAGGTAGTTATCAGACACTGGAGATGAATTA
CTGGGGATTTTTGTGTTCTGGTTCAGTATACAACCAAGGTAGAATATTGACATTGAAAAATAATGTCACCTCGTTTC

132/375

TCAAGGAAAATTTGTAGTTTACCGAACACAGCACAAATGAAAGCTGAGATACTTTACCAGTGATATTGTAGGTCTCAG
TGAGTAAAAAATCAATTAAAAGTATATTGGGGTGGCGGGGGGCACTGTGTATAGATAGACCTGGACATGATCTCTAATCA
CAAATGCTACTTTTGTAGAGGGCCAGATTCTTGATACAGAGACATTTTATTTGGTGGCAATAACCATGGCTTGTCCACAG
AATGATGCCGTATTATTCTCCTGACCTAACTTCAAAGAAATAAAGAGTTTGCAGAAGAAGTGCAGTTCTTCAAAGTAC
GCAATATGGATTTCGAAGATGAATGTAGTTTCTCTCTCTGAGGAATTTCTGAACAGTGGTAAAGTTTCAACAAGTTTATGC
ATATCTTTTGTCTACATCCTTCCCTAAAAGAAGCTTGTGGCAACAAAGGGAAAGAAATAACATTTTTTAATAACT
ATGTGGAAAGCTCTATAGTAAGTGCTTACATGTTACCTCATTTAATTCTTACAACCTTATCTAGTAAATTATCTC
CCATTTGACACTTTAAGGAAGCAGCTAAGAGATGTTTCATAACTTTCTAGAAAAGGTAGGATTTGAATGCAGGTTTGT
ATTATTTCAAAGCTCACAATGTGCTTTACGCAACATCAAAGTAACATATTGCGGGAATGAGTACCTTTCCCATTTAAAA
CAAATGAGTCTCGGAAACTCTTACCCTGTTTAGTTATGGAATGGCTCAGAAAATAGAAAGTGTGAGATCATCAAAGAG
AGAAGTTAACAAGAGCATTGTAATCCAGAAATAAGAACGCAATAGAGAAGTAGAAGTTGTGTGGCTAATTTTACCAA
CTAAATAGCCTGAATTATTAGTGTGACTATACACATTGATCAAATTAATGAGCATACCATAGTCTAAAGGGGACGAG
ATTTATATTCTATCCAAGAAGTCATTAATTATGTTTGTACTATCTTCATCATGGTTATCATTTTTCTTAGACATAGCCT
AATCTATAAGATTTTACTGTATTTCCCTGAATTACTAAATTCTTCTATTTTTGAAGTTTACTAAGATTTTATTGTATT
TCCCTGAATTACTAAATTCTTCTGTTTTTGAAGTTTTACTAAATACTTCAAGAACTTTACTAATTTAAAAGGTAATTTA
TAATGTTTATCACTAACAGTTGATAATAAAGCGCTTCCCTATAGCTTCTTAAGATAATAGCTAGAAAACAAAGCTGAT
TTTAATTATTCTTGTAAATTTGCTTCAACTTCACTGACAGTCTGTTGTATATTTTCTGCATATGTAATTACATCAGGTTT
TGACTATTTTCTCTGAGGTAAATAATTCCAATTACTTTAACCTGTCTGTTTCTCTTCTCTCATTTCTTTCTCTC
TCCCTCCCTCTCTCTTTCTCTTATTATAAGACATATTATTTGTTAATTTTAATAGCTATTCCAGCAGTTAAATATTCT
TATCATAAATTTCTTGCAATTTTTAAATGTGGAATTCAGTACAAAACCTTTGGTTTAGCAGTAGGTAAGAAAGATGATT
GAAATTTATGTAAACATATTATTCTTCATCAGGCAGGGCTAGCTGACTGACATCTGCTTTGGTTTGGATTCAAATACAG
ATTTAAAGGGAGGCTATACATGGAAATTTATCCCAGGCTCCTCCCGCTGCTGTTCCCAATTTCTGCAGCAGCCTGCAT
GCTTGTATTTAGGATTCACCAATTTTTTTGGCCCTTGTGTGCTTGGCTTTTGTTTTGAATTTACTCTACAATGGCAGG
ATGTTCTGGGAACTGATGTGATGAAGTAAAGGAAGCAAAATAGCCTTTGTCTATGTTTAATTTCCCTTAAATCTATTG
CCAGTGAAAGGCCTTTAAATTTTTTCAATTATAATTAATGTTTGTAAAGCAAAAAGCCTCTTCTGTATCTATAGACT
AAATCAGGGTTTCTTTAATCATAGGTGTTAATCCTCACTACTCCTTTACCCAAATACATTTTATAAGATGCTAAAGAT
GTCAAGGAAAATTCATATCTCTGACTAACAGAAAATATTCTTTCACAAATAAAATGTGAAGTGTCTTAGTTGTCCACT
ATTCTTTTAGGTCTTACATTATCTATATCTATTTTCAACAAAAGCATAAATTATGGGAACATTGAATTAATAAATACAT
GAAGGTCCATACCATGTCCCTGGATCAGAAGTCTCCAAATCATAAAAATTGCAGTGGTCCATCAACTGATCTGTAGATT
TGATATAATTTAAGTCAAAATACTGACTTGTATTTTGGGGGAACTTGCCAATCTGGGTCTAAAACCTTACACGGAAAA
GCAAAAATTAATAGGCCACTGTAGATTTTCTTACGAGGTAGTGTGAGTTTTTAAATTCATTTATTTATTTTATTTTGA
ACATTTAATTTAGGTTTGGGGTATATGTGCAATTTTGTATATAAGGTAAACTCGTGTCAAAAAGCATTGAATTTTATG
CCATGTTATCTATGGTTGAAATATAATAGGGAGCGAGTTTATTTTAAATCATGTGTCTTTTAAAGATTTGATTTATGC
TGACTTCAGAATGTGACGAGTTTTAGAAATCTGAGTGTAGGAATGAATGTTCTATTGGAAGTATCTAGTTTATTGCTTT
CAGCTCTACTGATCATGGATATTAACCAACTCTTGTTTTTGTTTTTGTTTTTTGTTTTTTGTAGACGGAGTCTCGCTC
TGTGCGCCAGGCCGGACTGCGGACTGCAGTGGCGCAATCTCGGCTCACTGCAAGCTCCGCTTCCCGGGTTACGCCATT
CTCCTGCTCAGCCTCCCGAGTAGCTGGGACTACAGGTGCCCGCCACTGCGCCCGGCTAATTTTTGTATTTTGTATTAG
AGACGGGGTTTACCCTTGTAGCCAGGATGGTCTCGATCTCCTGACCTCATGATCCACCCGCTCGGCTCCCAAGTG
CTGGGATTACAGGCGTGAGCCACCGCGCCCGGCTTAACCAACTCTTAAAGCAGTGTGTTGGCTCATGGACATTGGGGTT
AAGTCTGTGTAATTAGGGCTTTAGGATATTGGGATATTGAACTTAACACAGTTGCTGCTTTAATCCAGCATTTTAGGCATCAA
GATTTTAGGTAGCCAGAATTTGGAATAAGAAATGACAGTATGAGAAATCCCCGCTCTCTGAGGATGGGGGATGCTGGG
GCCCCGTACCATCAAGTAGCACATCCACAACCTCACTCCATTTACCACATCATCACCATCACCACCACCAACAAGCACT
TGACCTCCATCCTAATTTCAACAATCACCTTCAGTCTGCCTAACTGATGCTATGGAAGAACAACAGAGACTCAGAAGGG
TAAGAGGGTGGTGGTGGCGGGTGGTAGATGATGAAAGATTACTTACTGGTGTGAACCTTCAAGATTTGAGACAAAGTCTT
AGTTAATTTGGAAAGTTTATTTTGGCAAGATGGCATTGAGGATGTGCACCCCTAACAGCCTCAGGAAGTCTTGACAATA
TATACCCAAGGTGGTTAGGGCATAGCTTAGTTTTATACATTTTATAGAGAGACATGAGACATCAATCAATGTATGTAAGAA
GTGCACTGATTGATCTGGAAGGGCGGGACAACCTGAAGCAAGGCAGGAAGACTGGAAGCGGGAACTTACAGGTCACA
GATAAGTGAGATGAATGGTTGCATTATTTTGTAGTTTCTGATTAGCCTTTTTAAAGGAGGCAATCAGATATGCATCTATC
TCAGTGAGCAGAGGGGTGACTTTGAATAGAATGGGAGGCAGGTTGGCCCTAAACAGTTCCAGCTTGACTTTTCCCTTTT
AGCTTAGTGATTTGGGGGCCCCAAGATTTATTTTCTTTTCACTGGGTATAAGGTACATGATTTGAGTGATGGATACC
CTAAAAGCCCTGACTTCACTGCTATGCAATCTATGCATGTAACAAAATTATACTTGTACCCCATACATTTATACAAGTA
AAAATAAATAAATAACAAAAACAAAAACAAAAATAACAATGGCCCTAGCCATAAAGCAATTTTAAATTAGCGGGGAGGA
CAGATATGTATCTAACAGTTTACTGGAAGTGGAGTGAGCTCAATATGCTAAAATAGAATTTTGTGATCATATAAT
GTTTAAAGAGGAGGGAAAGGGTAATCTGACTGGAGGGATTGAGGAAGATTAGAGAAGTTGTCTATTGACTTGGCCTTGAGG
CAAAACAGGGGTTTATTTATTTCAGCAAAATCAATATGTATTGAGTGCTTAGAATTTAGGAATCATTGGAAGGGCATACTG
GGAAGAGATTATATTGAGATCAAAGATCAAAGAGAGAAAAAATGCAAGGAAGTTTTTGAATGTTGAGTCACAGAAGGG
TCTTAAAGCAAGAAGCTATAGGAGGAAAGAGGCAGTTGAGGAATGTAAACTAGGAATATGGATCAGGGGCATTTTCATGG
ATTTTACTCATTTTATACAGTAATTGGGATACTTCTTCAGTCAGCGCAACCATGAAAGGTTTTGAGTTGAGTGAA
ATGAACAGAGCATGATTTATTGTTGGATATGTTGGAGGGAAGGAAAAATTACTGAGGAAGACCAATTAGAAAAATTT

133/375

[illegible]

134/375

TCTGCTTCTAAGGTTGTTTCAGCCAGCCTTATAATGCAACTAGTGTGAGAAGCAGTGACACAAAAAGAATAGAGCCAA
 ACTTCAGGTAACACCCCTTTTAGGAGTGGAGAGAAGGGGACCTGTAGAAGTAGAGAAAGAAATCTGAAAAGGGGAAAACCT
 AGGAGCATCAGGGTGATTGATGCATGTGAAGCAGGAAGAAAGGCTTAAAAGACATTGTTAGTGGGGAAAATGAAGACAGA
 TAAGAAAAGAAAACAGGCCCTTTGGAGCTGAGGTCTAGGAAATTATTGGTGGGGGGAATGCAACTGAAATTGCTAGGAGTT
 GAGTCAGGCAGCTATGAGCAAGTTCAATGGTAGGTATAAACCATGCTTTCAAACAAAAAAGTTGAAATAAGAAAACAAG
 AGCCCAGATGCTAAGGACATGGGGAAATTAAGAAAACAGTTGAGGTAGAGAAAGAATTTAAGGAGGGCTGAATGCTATA
 ATAGCTGCCATTATTTGACTGCTTATTATGCACCGTGGAGAGTTCTAAATGCTTTAGCTAATTTAATCTTCATGAGACA
 CCTAAGAGATAAAATCCTGCTATTATTATTCATATTTTGGATAGGAGATTAAGGCACAGAGAGGTGCTACAAAACAAGTGA
 GTGTGAGGATTCAAAGAAGGAGGTTTTGCTCCAGAGGCCCTCTGAATTTAACCAGTGTGCTAGAGACACAGGGACATTC
 AATGGAGCATTAAATGTCCCAGCTGGTGACAGTTCGAGCTGAGGCTATAGATGTGTTGAGGAGTCAGCATCAGTGGAGG
 AGGAAAGAGATGCGGATGGAGGGAGACTCGGTGTCTTTGAAATAGATAAGAGAGAGAGACAATGTAATGGTTTTCCACTT
 GGCACAGAAAGAAATGCCCTTACTAATTTAGAGGACCAGGGAGACACAAGAGGAGCCTAAGAAGAATGGAATGAATTAGAA
 TCATCACTGTGGAGTCTGTGATAGGGAGTCAACTAAAGTGGAAATAAGTAATTACCAAATAACAATGAGGGGTGAGCAT
 CGGCAAAGGAATATGTTTTGTAATAGAGGCTTCGCAGCTGTATCTGGAGCCTGGGAGCGCAGGCTGAGAGGGACATTGAG
 ATGTAATGAGGGATGTGACATCTTAGACAGAGAGAGAGCTGGGATGCTCTCAAGAACCTTCATTGATATCCTGTCTGTA
 ATAGAAAGAGGTAAGTATAGCAAAAAAGTTAGAGCCATAATTGGTTTTTACATTTTAAAAATTGGATTATGATTAAAGG
 AAAACATTTAAAGACCTTGTCTAAAGGAATATAAAATCTTGAGTCTAGGCACTCTCCATAACTTAAATTAACCTTCCCC
 ATTTCTTCTACAGGAATACTCCTCTGTTATAAGGATTCAATAAATATGGTGACTTTATTGTTATTCGAAAGATTATAGG
 GAACCTTTAGGAGGTGGTATGGGTACAGAGGAGTCCATCTACAAAACGTTTTTTAGCCCATCTTCTAAGCTAAGCTGATT
 TTGGAAAAGGAGCTCTTTTAAAGGAGAATAAAGCTACAAAATGACCTTTAAACTGTCTATCCAGACTCTGGCTCTCT
 AAATTGGAATCTTTGACAAAACACAGCTGGAAGACAGCAGCCAGTAATACAGCAGCCATTAATACAGCTCCATGTCCA
 AAGAGGAGGGATGTTTGTCTTACTAATTACACAAAAACATGCAATATTCAGCCAGGTGTGATGGCTCACACCTGCAAT
 CCTTGCACCTTTGGGAGATCAAGTCAGAAGAATCACTTGGGCCTAGGAGTTTGAGATTAGCCTACACAATGTAGCAAGGC
 TCCATGTCTTTTAAAAAATAAAATTAAGGTAAAAATAAAATGCAATATTTACTGCTAAGATGTGCTTCTTGAG
 GATGGACTTGAAATGGTCCACCACCAGGACATTAAAGACAGGGTCTGCTCCTGCTTTCTCCTGAGAGAGGAAGAACACT
 GGTAGATTACAGAAATCAATACCAATATCTTAGTGATTTAGTATTCCTGCATTTATAACAGAGCATCCGGTAA
 TTGACTTGAAATTTGACCTTTTCATCCAGTATGCTAATGATGGTATAAAATTTACTCTCTTACATAAATAAAT
 GTACCCCTCAAATGTGTCAATTTTCTGCTATGACAGATGGATGCCATTTAAATTAACACTCCTTACATAAATAAAT
 GCTTTGCACAGCACTCTGCATCCACTTTTGTGTTTGGCCAGTTATAGCACTGCTTGTGCCCTGAGCTTGGCTCTCAAG
 GTGGCTACAGCGTGACATTTTCTTGAAGAGCGATAGGCAGAAATTTAATTGATTTGATTTTCAATTTGCTTGGATTCTCAAGGC
 TTCTGTGGCTATGCCTATTACCTAACACTGCTCTCAGGAGGTATAAAGCTGTGTCCAGTTGTCTTGTGCTGATGACTT
 GAGTGACTTGGTGCCACTTGCAGCAGCCCTTCTTGCAATGACTGCAATTCCTGAATCTATTATGACATAGAGACT
 CTAGGGACCAATGAGGTTTTGTGTAGGAGGGCTAACTTTTTATTTTCCCCTTATAGTTCTTTGTCTGGATTTTCCCCCT
 TTCTTATCTATCTTTATAAAGAGACCTTAAATGAAGGCTACAGCTATAAGATGAACAAATAGCTGGCTATTAAAAATCT
 CCAAAATGTATATAAATGCAACATGATCCCAAATGATTGGTTTGAATAAAATTCAGACTTTACTGATTGGAGGTGGG
 CAATTCCCAGTTATAGGCTGACCTTCCACTTCTTCAGAGCTAACCCCTCTAAACAAGATTAAGCTTATGTCTAGGATGG
 GAGAGAGAAATGGCTGGAAGAAAAGAAGATGTTTCACTTCTTATGTTGTGGCTTAATGTAATGGCTTAAGAACAATAAT
 TATTTTCTTCTCACAATTTGTTAGGCCAGATCAGGTATTGGCTTGGTGATTCTTCTCTTCATGTGGCATCAACCTAG
 CTGCATTCACCTGGTGACAGGACTGGGCTGAGCTGGGCTGGGCTGGGTTGGTCTGGGCTGGAAATTCAGGAAGCCTTC
 ACTCCTATCTGTGGTGCCTCAGGGCTCCTCTGTATATTATCTTTTTTCTTTCACTGTGATAGTCTCTCTAGAGAAATA
 GAACCAATAGGCTGTGTGTGTGTATATGTATACATACAGCCTGTATGTTTGTGTGTGTATGTGTGTATACATAAACATA
 CAAATGAGGCATGCCTCATTTTATTGTGTTTTGCTTTATGGTGCTTGACAGATATTTTATTTTTTACCCTTGAAGGT
 TTGTGAAAACCTCTACATCAACAAGTGATTTGATGCTATTTTCCACAGCATGTGCTCACTTTGTGTCTCATTTTGGTA
 ATTCTCACAATATTTTCAAACCTTTTTCATTATCATTATTTTGTACGGTGTTATGTGTGACCAATGATCTTTGTTGTTA
 CTATCATAATTGTGTTAGGGTTTTCAAACCATGCTATATAAGATTGTGAACCTTAAGTGATAGATTGTGTGTTTTCTG
 ACTGCTCCACCAACCATCCATTTAGTCCATTTATTATCTCTCTGCTCTCCTCAAACCTCCCTATTCTCTGAGACACAA
 CAATATTAATAATAGGCCAGTTAATAATCTTACAATGGCCTCTACATGTTCAAGAGTTTTTCAATCTTTTCTTTAAAT
 AAAAGCTAGAAATGATTAATCTTAGTGAGGAAGGCACGTTGAAAGCTGAAATAGGCTGGAAGCTAAGCCTCTGTGCCA
 AGCAGCTATCCAAGTTGTGAATGCAAAAAATAAAATAAAAGTTCTTGAAGTTCTGAATCTTGAAGCAAAAGAGTTCT
 TGAAGGAAATGAAAAATACCCTCCAGTGAACACATGAGTGGTAAGAAAGCGAATAGCCTTCTTGCTCATATAGAGAA
 AGTTTTAGTGGTCTGGACAGAAGGTTCAAACCAGCCACAACATTCCTTAAACCAAGCCTAATCTCAAGCAAGCGCCA
 AACTCTCCTTATTTCTTTGAAGGCTGAGAGAGGTGAGGAAGCTGAAGAAGAAAAGTCAGATGCTAGGAGAGGTGGTGC
 ATGAGGTTTTAAAGGAGAGAAGCCATCTCCATAACATCAAAGTAAAAGGTGAAGCAGCAATGATGTAGAAGCTGCATCA
 AGTTACCCAGACCTAGCTAATGCCATTGATCACAGTGGCTACACTAAATAACAGATTTCAATGTAGAGGAAACAGCCTT
 ACATTGGAAGAGATGTCACCTAGGACTTTTCAATGTTAGAGTGGAGAAGTCAGTGCCTAGCTTCAAAGGACAGGTTGACT
 CTACTCTTAGGGCTAATGCAGCTGGCGACTTTAAATTAAGCCAGTGCTCATTAGCATTTCAAAAATCCTAGGGCTCT
 TAAGAATTATGCTCACTGGTTTTCAAAGAACTTCTTGACTACTGCCTTAATTTCAATTTTGGCCAGGAGTTATTTCAGGA
 GCAGGTTGTTCACTTCCATGATGTTGTGTGGTTTTGAATGAGTTTCTTAATCTTGAGTTCCAGTTTGAAGTGTGATGTG
 GTCTGAGAGACTGTTATGATTTCACTTTCATTGCTGAGGAGTGTTTTACTTCCAATTATGTGATTGATTTTAG
 AGTAAGTTGTCTTGTGGCACCAAGAAGAATGTATATCTATTGTTTTTGGGTGGAGAGTTCTGCAGATACCTATCAGGT

135/375

TCACTTGACCTAGAGCTGAGTTCAGGTCCTGAATATCCTTGTTAATTTTCTGTCTTGATTATCTGCCTAATATTGACAG
 TAGGGTGTTTAAGTCTACCACTGTTATTGTGTCTAAGTCTCTTGGTAGGTCTCTAAGAACTTGTTCATGAATCTGGCT
 GTTCATGTATTGGGTGCATATATATTTAGGATAGTTAGCCCTTCTTGTGAATTAATCCCTTTACCATTATGTAATGTC
 CTTCTTTGTCTCTTTTGATCTTTGTTGGTTTAAATCTGTTTTGTGAGAACTAGGATTGCAACCCCTGCTTTTTTCCG
 CTTTCTATTTTCTTGGTAAATTATCCTCCATCCCTTTATTTTGAGCCTTTGTGTATCTTTGCACATGAGATGAGTCCCT
 TGAATACAGCACACTGATGTGTCTTGATTCTTTATCCAGCTTGCCATTCTGTGTCTTTAATTGGGGCATTTAACTCAT
 TTACATTTAAAGTTAATATTGTTATGTGTAAATTTGATCCTGTGCATCATGATGCTAGCTGGTTATTTTGACAGACTTGT
 GATGCAGTTGCTATATAGTGTCTTGGTCTTTATATTTTGGTATGGTTTGTGAGTGGTTTGTAAATGGTTTCTCCTTTAC
 ATAGTGCTTCCCTCAGGAGCTCTTGCAAGGCAGGCCTGGTGGTGAATAATCCCTCATCATTTGCTTGTTTAAAAAGGA
 TTTTATTTCTCCTTTGCTTATGAAGTTTAGTTTGGCTGCTTTGAAATCTGGGTTTGAATTTCTTTTTTTTTTTAAGA
 ATGTTGAATCTTGGCCCCCAATCTCTTAGCTTGTAGGTTTCTTCTGAAAGGTCTGCTGTTAATCTGATGGACATGA
 ACAGACACTTCTCAAAGTAGACATACATACAGCAACAGACACATGAGAAAAAGCTCAACATTATTGATCATTACAGA
 AATGCAAAATCAAACCACAATGAGATACCATCTCATGCCGTGAGAATTGCGATTATTAAGGTCAAGAAACAACAGA
 TACTGTTGAGGCTGTGGAGAAATAGGAACGCTTTTACACTGTGGCTGGGAATGTAAATTAGTTCAACCATTTGTGGAAGA
 CAGTGTGGCAATTCCCTCAAAGACCTAGAACCAGAAATACCATTGTACTCAGCAATCCCATTACTGGGTATATGCCCAA
 GGAATATAAATCATTCTATTATAAAAAATACATGCACATGTATGTTTCATTGCAGCACTATTACAAATAGCAAAGGCATGG
 AATCAACCCAAATGCCACCAATGATAGACTGCATAAAGAAAATATGGTACATATACACCATGGAACACTATGCAGTCA
 TAAAAAAAATGAGATTATATTCTTTCAGGGACATGGATGGAGCTGGAAGCCATTATTCTCAGCAAACTAACTCAGGAA
 CAGAAAACGAAACACCACATGTTCTCACTTATAAGTGGGAGCTGAACAATGAGAACACATGGACAAAGGGAGGGGAACA
 ACACACACTGGGGCCCATTCAGGGGTGCTAGGGGAGGGAGAGCATCAGGATAAATAGCTAATGCATGTGGGGCTTAAG
 TCCTAGGTGATGAGTTGATAGGTGCAACAAACCACCAGGACACACATTTATCTATGTGACAAACCTGCATGTCTGCAC
 GTGTATCCAACAACCTTAAATTAATTAATTAATTAATATGCTAAATCTACTCTCTTTGTGCTCTATAAATGGAACAACAA
 AGCCTGTATTACCGTATTTCTGTCTGCAGCATGATATACTGAATATTTTAAAGCCCACTATTGAGACCTACTGCTTAGGA
 AAAAGAGATTTATTTCAAATATTACTGCTCAATTGACAACGCACCTGATCACTCAAGAACTCTGATGAAGGTATACAAG
 AAGATGAATGTTTCTCTCATGCCCTGCAAAAACAACATTCATTCGCAATCAATGGATCTAGGAGTCATTTTGACTTTCA
 AGTCATACTATTTAAGAAACACATTTTCATACAGCTATAGCTGCTATAGATAGTGATTTCTCTAAAGGATCTGGGCAAAG
 TAAATTTTAAACTTCTGGAAAGTATTTACTACTCTAGATACAATTAAGAACATTTATGACTCTCAGGAAGAGGTCAAG
 ATATCAACATTTACCGGCATTTGGAAGAAGTTGATGCTAACCTCATGATGACTTTGAAAGTTTCAAGGTTGCACTAGA
 GGAAGTAACTGCAGAAGTGGCTGAATTGCTGCAATTTTCATGATAAACTTGAAGAGATGAGGAGCTACTTCTTATGGGA
 GCCAAGAAAGTGATTTCTTGAATGGAATCTCATCTGATGAAGACGCTGTGAACATTGTTGAAATAGCAGCAAAAGGTT
 TTAGAATATAATATAAACTTACTTGATAAAGCAGTGGCAGGGCTTGAGAGAACTGACTTCTATTTTGAAGAAAGATATA
 CTGAGGGAAAAATGTTATCAAACAGCACCACATGCTACAGAGAAATCTTTCATGAAAGGAAGAGTCAATGGATGTGGCA
 AACTTCATTGTTGTATTTTAAAGAAATGACATAGCCACCCCAACCTTCACAACCCCACTCTGATCAGTCATCAGC
 TACCACATTTAGGCAAGACCTCTGTGACGAAAAAGAGTACAAGTTGCTGAAGGCTCAGGTGATTGTTAGCATTTTCT
 AGTATAAAGTATTTTAACTAAAGTGTGTACACTTTTTAGTTACAATGCCATTACACACCTAATAGACTGCAGGATAGT
 GCAATGTAAACATAACTTTTATATTCAGTGAGAAACAAAAAATTCATGTGAGTTACTGTATTACAATATTTGCTTTAT
 TGCAGTGGTCTGAACTGTACCTGCTATATCTTTGAGGTATGCCTGTGTGTATGTGTATATATATGTATGTATACACAC
 ACACAAACACACACACACACACACACACAGAGAGAGAGAGAGAACAGAGATTATTTTAAAGAAATGGCGTGAACC
 CAGGAGGCAGAGCTTGCAGTGAGCCGAGATCGTGCCACTGCACCTCCAGCTGGGTGACTGAGTAAGACTCTGTCTCAA
 AAAAAAAAAAAGAAATGGTTTCATTTGGTTCATGGAGTTGGTGAGTCCAAAACGTGCAGGATGGTCCAGCAGACTGAA
 GACCAAGGAGTGGATTTTGCAACTCAAATCCGAAGGCTATCAACTGGCAGATTTCCCTCTTCTTTGAGAACATCAGT
 TGTTTTTGTATTGTTGCTCTTAAGGCCTTCAATCTTTGAGTGAGGCCCCATCCACATTATGGAGGGTACTCTATTTTA
 CTCATTACTGATTAATCTCATCTAAAGTAGTTTCACGGCAATATAGATATGTTTGACCAAATATCCAAGTACCATG
 GGCTAGCCAAGCTGACATATAAAGTTAATCATCACTCTCTGTGTAGTGTCTCATCATTTAGCCCAAAGAAGCTTGGG
 CTTCTTTACAGCATACAGCTGGCTTCCCAGGGAGAGCAAGTGGGTCTGTGACCTGGGCTCAGGAGTCCCGGGATAT
 CATTACTGTTGCATTCTATTGGTGAAGAAAGTCAGAGTCCAGCTATAGCTAAGGGGAAGAACTACAACCTTACTT
 CATGGTGTGAGGAATAGCATATGTGGGCAGGGATGAGGGGAATAGTTGGAGACTAGCTATCACAATCTTCCCTCTGGCC
 ACAGCACTTCTTGTCCCTTTTCAGAAAGTCTCATCACATTACAGTGCTGGGCCCAGCTTCAAGGTCCAAAATCATATAA
 TCTAAATTGGGTATATTTAAAGTTGATGTTCCCTCTTTATCTAGATACTTGTACCTAAAATGATACCTTCTGTGTAATC
 CCCCTTCCCTGCAACATACATTGATGAGACAGGGATTGTTGTATCGCTAGCAAGAAAGTCAGCCATTCAAAGGAGGGGA
 AATGAGAGGCACATAGCAATCGGTGCTTCATAAAAATCTGAGATCCAGCTGGGAACATGTTACCAATTCCTCAAATC
 TAGGTTTCTGAAAAGGATCCTGTTCTCTGGATGTGGATTCTATTCCATTGTTTTTCACTGCTGTGACTCTCTCCTC
 TAAGTTAACCTTCTTTCTGTAAAGAAATGGCCCTCATTCGCAACGGAGTCACTTTGTGAGACTATTTATTCCATTAA
 AGGTTTGGAGGCCTAAAATCTTCTTTTCAATTTGTCTGTCACTCTCCCTTTTCTTCCAAGGTGGCACAGCTTCTTTTT
 AAATTTGTAATTTTCTAATGTATCCAGTTATATTCCATTCCATTGGGCGAAAGCTATTTCCCAAGTCTCTTTAAGAC
 AGACACTTTTCTTCTTAGACTGAGAGTCAGAATCCTGTGCAGTAACGTTTTTAAGAGTTTAATCACCTTGTCTCCTA
 GCAGAGTGGAACTTATAAGGGTTTTAAGAGGTATCTTACTACCACATTCTTGACTTGATATTTACCCCTGAGGCCACATT
 GTACTAGCAGTACTTGATTTGATCAGAGACCATTTTTTACTCTGAAAACCTTCTGCCATCTGGAGGGGTTGAGAATGAG
 AAATAATATTATTTTCTAAGCCAGCAAGTCTGAGTTGGACTTTGTGGATTAAATAACAGTTTCTTATTTCTGATGGG
 TAGGATTTCTCTGAGTATGTCTTCTGCTCCATGTGGTATTGATTAGGTAGGTCACTTACGTGGCTACATTTAGTCAATA

136/375

GCTGGTCTGGGCTGGATGGTCCAAGAAAGTTTCAGTCATATACCTGGCACCTCTGAGCTTTTCCATATGGCCTCTATGT
GGAATCATCTTTGGGCTTCTTAATAGTATGGCTGATTGAGCTGGTCAGACTTTTTTTTTTTTTTTTTTTTAAAGTGG
AGTCTTGCTCTGTTGCCAGGCTGGAGTGCAGTGGCATGATCTCGGCTCACGGCAACCTCCGCCTCTGGGTTCAAGCAA
TTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGACTACAGGTGTGCACCACCATGCCAGCTAATTTTTGTATTTTTTAGC
AGAGATGGGGTTTACCATGTTGGCCAGGATGGTCTCGGTCTCTTGCCAGGCTGGTCAGATTTTTTATATGGAGGCTGAC
TCCAAGGGAAGGTGTTTTAAAGGAACAGGCCTGCCAATGTGCAAGCACTTATCTAGCATTGTGCTGCATAATTTTTCT
AATGTGCCAAAGTAAGTCATATGGCAAGGCCAGGATCAACATGGGAGAACTACATGAAGTGGCAGTGCCAAGAGGTAG
CATTTATTATGGGTCACCCATATAACAATCTCTCACACAGAGTAGTTTGGTAGCTGGACAGAAATAAATTTGTCTATCTT
CTTGATACCTTTTACTAGTAGTATAACTTAGGGCAAAATGCTGTGCTTCTGGGATTCTTATTTGCTGCTTGTAAATAGA
AAACATGACACAGATGCTACTAGATCTTTGTGACAACTGTACACACATATGCATACACACACACAGAGGTACTCACAG
TGGTACTTAACAATGGCTACTATGTTTAAATGGTGACTTGGCAGACCAGCAGTTAGGTTTTGAATGGACTAACTGTGG
TTTTATCATATCAGGACCAGGTTGTAATCAGAAATCAGCGCTTGCAATAGCTCAAGGTGATTAAAGGTAAAGGTTAAA
AGTTGAGAAGAAAGGTTGGTGTTAGATACTATTAGTTCTTGCCAAAAGCTGTTGGCCTTGGGAGAGGTGGAAGTTTGA
GATCAGGGATCACAGTTATATGAGAACACACAGTGTATGGTGAAGTTTGAACAGAAATAAGTCAGGATTATACGGGG
TCCAAAAAGCGGAGTCAGGGCACTCATGAATCTAAACAGATATAGAAAGCTTATGGAGTCAGAGAGCAGAAATCAGGG
ACACAGGCAAGAAATCCAGGAAAAAAGAAATAGATATACCCAGTATGTTGAGACAAATAGCTATGGGGCGCAGAGGCA
AGAGAAAAATTTGGTAGTTTGGAGCCATTGTCTCCAAAACATAATTATAGCCAAAAGTAAACATGTTTCACAGCATGTGG
GCAGATCTTGAGCCATAGGTGGAAAAAGACATCTGGTTAGAATACGATGGCAGCAAATTTGGTAGCTCCTGACATGCATC
AGAACCCCTTTAAATTTTCATGGGATTGAGGTTGTTCTTCAATTATTTCAATGATCTAATCTTTAACTTCTTGAGAAT
ATGATGTTTTCTAAAAAGGGGACTCCACACAGAACTGTGAGGCTATGAAGCTGTCGATGGCATTGTTAGTACTCAC
ACAGTTCAAAAAATGATGCTATCTCTGCCATCTTTGTTCCATCTGTAGAATAGTCCATTTTTTTGGTTATAGCAGT
CGTCTTCTTGAATGGTTCCTACCCAGAGGGAAATCGGAATTGCCGGTACTCCTATGTCTCAGTTGCAGAAGTCAGGAT
TTTTCTGAATCATTCTGAGCATCTTATCTTCTCATGCTGATTATTATTTAGTCTGAAAGCTTATGCTCTCTTATA
AAGTCACATTGTACTTTTCGTTTTCCATTGAAAATCTGAATAGAATAAAATGAAATCATTTAAAGTCATGTTTAAGAAA
AGTAGAGTTTCTTGATTAAAAAGGAGAAATTTAGAGTGGCATTCAAAAGAAATACATTAAAGGAAAAAGTAGCATGCA
CTCATGCAGTTCTTGTTGGGAGGATAGTTTCTTTTCTTCTCATTCCGCCCCATTAAAAAGTTCAATTAATTTCTTTTAA
AGATTTCAATTATGAATGTATCTTAGGCATTGATAGGGAGTAATTTTTAGATCTGACTTATTTTTATATATTATTGTTTC
ATTTTTATAGCTTTTCTGAGATTCTTGGCAGTGAGTCAGCACACAGCATTTCTACCTATAGTCCAAATTTATATGAGTCC
TACTTTCATGCACCACTGTGATAGTGATGTCTCGGTTAGTGGCTATCATGGTCAGTAGCCTGAAGATCTATAGCATCTA
CATATTTAGAATGGATTTTTAATGTCTATGAGAGCCTTTATTTCTCCACTACCCGGTCTCTTGTGGATCCTGAGTCTG
AGGAGAACATAACTGTCAATAGAACCACTTTTAAAGAAATGTCTGTAATTAAGATTTTGTATGACCGAGTTATTAATTA
GGAAACAGGGTCTCCATATTTTGTCTGCTGCTTCTTATGTCCTGAGCAAGGGTCAGCATACTTTTACTGTAAATGG
CCTGGTAGTAAATATTTCCAGCTTTTGTGGGCCACATCATTTCTGCTACAAATACTAACTGCCATGTGGTACAACAGCA
GAAAAGGACCTATGCATAGACTGCTGTTTTAATGTCAATATAGTATCAGTAGAAAAGACAGGGCTTAATAAAAACTTT
GTGTAATATGGTCTCTTTGGCATAAAATTAAGAAATGTATAGAAGTAAACGTTGTTACAAAACTTTTGCAAATGTGTG
TCGCTTTTCCAGCACTCACGAATAACAGTCATTTTTAACCAGACTTCTCGTTTTTGGCAAGTATTATTTGTTCTCATC
TAGTAACAGTCTAGGACAGGTGTGAGCAAACTACTGCCACAGGCTAAATCCTGCACCTTGTCTTTTCTCTCATGCCAC
ATAGATATTCAAATGAGGAATCTATGCACAGGTCTTTGACCCACCCATCAGCAGAACATGCCCTTTCTGGAGCTCCATT
TCTCACTCTCAATAGTGCTGACCCTTAGGAGGAGCTGTCCATGTTCTTTGTTTGAATTTCTCTATGAAAAATGACAT
CTTTCTGAAGTGATTGCTGGAATAATGGGGCCTTTTGTGTTTGCAGACCTGTTTTCTCAGTGAAGCTGGCAGGGAC
TGGTAAGGAATCAGAATTACAATCTTGTCTTTATTAGCACTGTGTTTGCATCAGTCCCTCTCCTGAGAAACAGTGCAGGT
TGAGATAAATTTCTCCTGTGAAGTGATACAATTCATTTTCATCTCATATATGCATGGCCTTTGTGCCATGCAGAACACA
CTTTTACTGTTGTTGATGTAAGTGAGATGTTATTAAGAGGTTTTAGTTTGAGTTTATTTTAGATAATACCAATAATTG
AATGCTTTACTAGTGTTTACTACAAAGGTTTAAAAAATCATTACTACCTATAAACTGAGTAAAAATAAAAAATGATTTAG
AACTAAAGATAATCTCAAATTTGCACATTAGATAGCTATCCTATGTTGTAGAAGATATTCAGTCTGCATCATAATATTT
GAAACAAATACAACATTTTACCATAAGACAAGAGCAAAATGCACAAAGAATCGAGTGTTCCATGCAATAGGCTTTATGA
ACACAAAGCCTGTGGCCAAAATGAGGCAAGAGGAAGTATGAGGGGTACACAGATGTCTATGTGCAGTACCACATACCACC
CCTGGGGAGTGATAAACTTTTTTGTGTATTGTCATTTGACTGATTTTTTACTTTTGTGAAAACATAATGTGCTGGGGAAAA
TCACATCTGAATCCACAAAATGTCCATGGTATATTGACATGTACCCTAATTTATCAATTTTGTATGAATGTATTGCA
TTAGAGAAACATGTTTCAGAATACATTGTGCTTTGCAAGTGTTTGCAGTGTGCAAACTATGTGCTTTATCTCACTGAA
TCTTCACAATTTACTGCATGCGGTGGGCACTATTTTTCATGCCTGTTCTACAAATGAGTAGACATATAAAAGTTAAATAAC
TTGCCAGTGGCTTTGAGGAAATACGTAACAGTATATTAGAGATGGGATTGAGTTATTCTAATTTTTCAGGAAGAAGAGGA
AAGTGAATTTCTCCCACTTATGTCCTTAGGGAGTAGGACATTAATTGTATTTCTTTTAGTTCTTTTGCAAATGTTACT
TTCACAGAGGCTTCTCATGGATCCCTATCTAAAATTAATCTCCCACTTCTATAGACTTTTGTTTAAAAAAATAGAGGCCA
CAATGTACATACTCCAAGACCAACTGCCATTAGCCACATAACCAAAATTTAAATTATCTCAATTTTCTCCAAAATACTA
GGTCTAACCATAAACAAAACGTGAATGTGAGCTTTTTCATCCTTGTCAACATGACTCAGTAAATTAACCAATCAGCT
GCAGACAAATCAGCTTAAACAGTTTTTACTTGTCTTAAAGGAATATAAGTTTATGATAGCCAACCACAGCGAAGACAGA
TGCAGTTCCCTTAATTATGCTTTTATAAGCTGCATTTTAAATGCTGTGAACAGAGCTTCTTACCCTTTTGTATTTGAGGTC
CCTGGTTTGCAACTGTCTTTTGTATGCTCAATAAACTTTTAAAAATTTTTCTAATTTGATCTGATTTTAACACATTC
TATCTACTTTAGTGCTTTTATATCTTAAACACATGACGCTAACATTCTATATAGCTCACTTGTTTTACTGTTTATTT

137/375

TCCTCTCCCTACACTAGTGAAATTCCTATGAAGGCAGGAATGTTTGTCTATTGTCTACACTACTGTATTTCCAGTGCCTAA
TATAGGCACTCGATAAATAATTATTGAATGAATGAATCAATCAATTGATTAAATCTTAGGAAAAGTTCTTTAATGGATCT
TAAAAAAAATCTTGTGAGCCTTTAGAAAAGGAAAGTGATGATCACCTGGAGCTTGTATTAGGTCACTAATAGTAAAGCA
TATCAGATTAAATAACTTACTTTTCCATAAGACCAGTGTATCTGAGGAGTGCTGCTCCCCCTGTCTATCTGAATTTCA
ACGTTTGATAAAAAACCTTCCATGATGAACCTTATGCTTAAAGATGTAGGAAGGCAGTTGATGATACTGTTAGGCAGAGTAA
CAGCTGAATGCCTGTATTTCATGAATCAATGTTTAGAGAGAGACCTCTAGTAATTTGGCTGAAGGATTTGGTCTTCACATT
TCCTGTTTACCATTTTTCTATTGTTAATTTTGAGGGTGGTATTAATGGCATAAGGAGCTAATCCACAGATGAAATAAAAAAT
GGCAGGAACCACTAATATGGCTGTAAACAAAATCAGCATACAAAATTACTTGACAGACTAAATGGGAGAGGTAAATATA
ATAAGACAAAATACTAAAATGAAAATATAAAGTCTAAAACACCAGAGGGAAGTAGGAACCTAATGTTGTTTGGAGGACAA
TAGGAGCAAAGGTGAGACATAGTTTAATAACAACCTGTAGGTTTAGGTGGTAGTTACAGAAGCATAAAATCAATAATATGA
CATTATCCCCCAAATATTCAATTCATTCTTGGGTTTCATGAATAGAATGAGGTTTAGAATAGAAAAGGTAATGATTTG
GCTGTAAATTTATGTTGCTTCTCCCATAGCTAGAGCTATGACCCCAATCCTGGGCAATTCACCTTAAAGAACTTTGAGAA
GTAGTGTACACCTAAAACCTTGCAATCCTCATGGAAAGATGAGTCCAAACTGTGTACGTTGAAGAATACCTAAAGCTGTG
GTTCCAAACTTATGGCCTTCAGATGTGTTCTAAATGGCCCATATGGGGTTTTTGAATAATTTGAATTTGCGGCAGATGTT
TCAAAATTAGTAGATGTCCTCATTAAATATAGATTTCTGGGATTTACTCTTGCTACTGTGAGGGTGTGTGATCCTGTGTT
TGTGTTCTCTCAGACCACCTTACTCATTAAATTTCTGGTGCCTATAGCAATCGGGGTGCTAACACCCCGGGGG
GATAAAAAGGACTGGGGAATTCATGGCCTGTAAAAACAAGTTGGGGTTGGAGAGATATAAATATATCTGGAGAGCTTT
CATAGGGCAGAGCAATTAGACCCAATCTTTGTGTCCCCAAAATGTTAAACACTGGTATTAATAAAGAAAACATATTT
CCATTAACCATATAGAATAACTATCTTATAGTGACTTGAGACTGGCTATTTTATTTCATCTTGTTCATCAGTACCGAG
AAGAGTTTCTGACAATGTTTGTACTCAGCCACTCTTAACTGAATAAATGTGGCAAAACAGGTTGCGAGTGGTGAATTC
ATTCCAGGAGCAGCTAGAATATATGCTCTTTGAGAGCAGAGATCTTTGTCAATTTTGTTTACAGCTATATCAGAGCACC
TAAATCAGTGCCCTGCCATGTAGTAGGAGCTAATTAATATTTGTAGATTTTATAATTTGGAGATATTCAAACATAGAATC
ATGGTCTACTTGTCTAGTGCTGTAGGAAAAGTAATTAACAATATAAGTAGAGGGTCATGAAACAAGGGAAATACTGAAG
TAGATGACATTTAAAGTTACTGCAACCCCTGAAAGCCTATCAGACAGTGACATAGAATGGGATTATGTATTTTACATTA
AATATTAAGCATAGTAAAGTTAAAGTAGTGTAGGTATGTGTGGTAACAAAACCTGAGAAAGCAGTTTGCCAGTTATTTAT
TTATGGTATGGACAGGAAATTTATGGCTAGATTTTTAAATGAAAATATCCAATAGTTGAGATTTTTCTGTATTTAACT
ATATCTTATATCTTATGTCCATATTGATGACAGTGATTATTCATTTTCAATCGTTTTGTGTCTATCAGCAGCAGTTA
ATCATTCCTACGTGATGCAAATATACTTTTATTCCTGGTATTTGTAAATTTAACTTACAAAACACACGTTGCCTTGAGG
TTTGGCATGATTTGTTATTTCTATCCTTCAAGAAGACCCATGATAACAAATCAAATCATTGAGAAGCTGATTTTCACTTTT
ATTGTTTGGGGTGGTAACTGAAGGTGACGTTTTGAAAAATCATACTATAACTAACCTAGAAAATAATGTTTCAGAGGCCA
ACATGTGGCAAAGGAACACATAGTTAAGTATATAGTTTTTAATAGAAATTCATGACCTTTTATTGTGAAGGTCTAGC
ATTTTAATATTTTCAAAATCCAGAAAGATGAAAAATTTCTTTATAAACTTGAAGGGAATAAAGTCTAAAGCCCTG
AATTTGAGTTCTAGAAAATGAATGTATTTAAATGTCAGTCTGAGGTGCTGTATGCTAACTATGTAAAGCAATAGCTTAT
TAAATTTCTGGAACTTGCTGTTTATTTGAAATTTGAGTATGTTAATTTTAAAGGTTAATGGATACCTTAATGGTTG
ACATTTTCTCCTGCTTAGTTTCAGGAAAAAGAAAAGAACCTTAATTTTAAAGGTTAATGGATACCTTAATGGTTG
GATTAGACCTATGCATCATCATGTTTACAGCACAGAACAAATGGGAAAAATTTCTATTATGGAGCAGTGCCACATAACCT
TAATATCCTGTATCATCATATTATCATCATATTATGTGTTGAGTATACAAGCGTCTATCTCTGAGGAATCTTAGCAATT
TATGAATTTGTTTTAATTAGTTTCTCAGCCTTCTCATAGGGCATGGGGGACATATTGCTTAAACCTTAGTTTAGAGCC
AGCCTTAGGTAAAATGGTGATGCAAACTGTTTTACTTTGGTGAATCTTCTGCTTGCAGGGATACCTCCTTTTTGAC
AGCACCTTATTTCTCCTTCTGTAACTAAAGGAGAAAATATTATACATTTTATACTTAAAAATACGTAGTTGAGAAT
TTCAAATATATGCAAAAGTACAGAGAATAGTAATTGGTTGGCGGAAAGTAATTGTGTTTTTTGCCATTTAATGGCAA
AAACCACAATTGCTTTGCCCCAACCTAATATAATGCATCTTAAATACTCATCACCCAGTTTAAACAATCTCGATATAC
AATAGTTCTTGTTCATCTGTACCTTTACCCATATTTCTTCTCTACAATATTTTCAAATTCATACACAATATTT
CTTCATCTGTAAGTCCTTTAGTATGTATCTAAAAATAGTCTTTTAAAAATTACCTCAATAACATTAAGATGCTTGTA
TTTTCTTAAAAAATTTCTTAATAATTTCTTATTATCAAATGTAGCTGATTTTAAAAACAATTTTATTAATAATTTTAA
TTTTTGGTATGAAATGGTAGCAACTAAGGTTAAAGATCGAAATCATTATGTGTCTGAATTTCTTTTTACACTATAAAT
TTCTCTTTCTATCCTTCTCTCTGACCCCTTTTAAAAAACTGGGTCTACATCTTACAGAGTTTCTCATAGGTTCAA
TTTTGCTGATTGTATCTCTATTGTGTTGTTCAACCTGTCTTTGAATTTTCTATAATTATTAGTTAAATCTAAAGGCTT
GATAAATGACTAATGTTTTATTATTTTGGAGGATAAGCATATTGTTTGTGTTTCCCGAGCTTTATTAAGGTATAA
ATAATAAATAAATAATGTATATATTTGAGGTAGACATGTGATGACTTGTATAGGTATACATTGTRTAATGATTACCAC
AATAAATAATCAATGCATCCATCCCTATAAATGGTTACCTTATTCTATGTATGTATGTGTGTATGTGTGTGTG
TGTGTGGTAAGGATTAAGTATTAAGGATACTTAACATTTACTCTCTTAGCAAACTTAAACAATACAGTATTATATCTA
TTGTACCAAGCTGCAATATTAATCCCATAAATGTATTTGTCTTATAACTGAAAGTTAGTATGCTGTGTGTTCAATTA
CCCCATTTCTACCATGTCCAGATTCTGGCAACCACCATCTACTCTGTTCCTATGAGTTCAACTATGTTAGATTAC
ACATATAAGCAAGATCATACAGCATCTGGCTGTCTGTGTCTGTTTATTTTCAAGTTAGCATAATGCTCCTCCAGGTTTATC
CATGTTTTCTCAAATGGCAGGATTTGTTTTTCTTTTTACTGTTGAATAATATTCCATTGTATATACACCACAGTTTCTC
TATTAATTCATTTGTCAATGGACACTTAGGTTGGTTCCATACCTTGGCTATTGTCAATAATGCTGCAATGAAGACGACA
AGTGCAGACATCTTTCAGCATGCTCCTTTTCTTTTGGATATATACCCAAACATTAGAGTGCTGGATCATATGGT
ATCTCTATTTTTAATTTTTTGGAGGAATCTTCATACTGTTTTCCATAATGGAGTTACCAATTTACGTTTTTACCAGCAGTG
CTACAAGCGTTCCCAATTTCCACATAGTCACCAACACTTTTTATGACCATCTAATGGGTGTGAGAAGATACCGCATT

138/375

GTGGTTTTGATGTACATTTCCCTGGTGATTAATGATGGTGAACACCATTTTATATACCTTTTGGCCATTTGTATGTCAT
CTTTGGAGAAATGTCTATTCAAGTCCCTTGCCATTTTTTAAATGGGTATTGGAGTGTTTGCATTGAGTTGTAGGAT
TTTTTTGTGTATTTTGAACATATCAGGTACACTCAGCCCTTTGTATCTGTGGGTATGCATCAAGGGATTCAATTATCT
GAGAATCAAAAATATTTGAAAAACATAATAAAACAATAAAATAATTAAGTAATATAGTATAATTATTTACATAG
TGTTTACATAGTATTAGTATTATAAATAACATAGAGATGATTTAAAGTATGCAGGAGGATGTATGTAGGTTATATGCAA
ATACTATGCTATTTTATATGCAGGACTTGAGCATCTGAAGATTTTGGTTTCTGCAGAGGGTGGGAAAGGTTGAACCAAT
CCCCCATGGATACCAAGGTAAACTATGTATGGTTTGCAAATATTTTCTATCATCCATATGTAGAAAATATTTTCATTTT
GCTGATTGTTTCCTTTGCTGTGCAAAAGCTTTTAAGTCTGATGTAGTCCCATTTATTTTTTATTTTGTTCCTTACACTT
TTGGTATCATATTAATAATAATCACCAGACAGTGTCAAGAAGCTTTCCACCTGTTTTCTTCCAGGAGTTTGTGG
TTAATGTTTTAATTTCTTTTAAGCACATTTTGTATTGTATGTAATAAATATGGATACAATTTCAATCTTTTGCATA
TGAACATCCAGTTTTCCAGGAACATTTATTGAAGAGACTATTATTTCCCATTTGTATATTATTCATGCCCTTGTCAA
GACTAAGTATTATATATGCAGGGTTATTTCTGGGATCTCTATTCTGTTCCATTGTTCTGTGTCTGTTTTTATGCC
AGTACCTCACTGTTTTGATTACTATAGCTTTGTAATATAGTTTGGAAATTAGGGAGTATGACGCTTCCAACTTTGTCTT
CTTCTTCTTCTTTTTTTTTTTTTTTTTTTTAGATGGAGTCTCGCTCTGTTGCCAGGCTGGAGTGCAGTGGCATGATCT
TGGCTCACTGCAACCTCTGCCTCCAGGTTCAAGCAATCTCTGCCTCAGCCTCTCTAGTAGCTGGGATTACAAGCACC
TGCCACCACGTTTCGGCTAATTTTTGTATTTTAGTAGAGATAGGATTTACCATCTTGGCCAGGCTGGTCTTGAACCTC
TGACCTCATGATCCACCACCTAGGCCCTCCCAAAGTGCTGGGATTACAGGCGTGAGTACCACGCCAGCCATTCTTCT
TTCTTAGGACTGCTTTGGGTATTCAGGGTCTTTTGGTTTTCATATGAATTTTACAATGGTTTTCTCTATTTCTGTGAA
AAATTCATTGAAATTTTGATAAGGATTGCATTTAATATGTAGATCCCATATGGACATTTTACAATATGAAATCTTTC
AATCCATAAAATATGGGATATATTTTCATTTTCATTAATGTCTTTAAGTGTAGAGATCTTTCACCTCCTTGGGTAAATC
ATTCCTAAGTATTTTGTCTTTTAGATATTATTAATGGGATTGTTTTCTTAATTTATTTTACAGATAGTTTATTGTT
AGTATATAGAAGTGAACACTAGTTGCTGTATGTTGATTTTATATCTTGTAATTTGCTGAATTTTCTTAATTTATGAC
AGTTTTTTTAGTGAAGTCTTTAGAGTTTTTTTTTAAATATAGAAAATGTCATCTGCAAACTAATTTGGATGCCCTTTTAT
TTCTTTTTCTTGCCTAATTGCTCTGGCTAGGGCTTTTATTACTGTGTGKAACACAAATGGCAAGAGTAAGCATTCTTGT
TTTGTTCAGATTTTAGAGAAGCAGCTTTTCACTTTTCCACCATTAGTGTGATGTTAGCTGTGGGCTTCTCAAATATGG
CGTTTATTGTCTTGAGGTTTCTTCTTCTATTCTTAATTTGTTGAGAGTTTTTGTGATGAAAGGATGTTGGATTTTGTG
AAACACTGTTTCTGCCTCTATGGAGATGATTATAGATCATATGATCTTTATCTTTCATTGTGTTCAATCGGTATATTAC
ATTTTTTGATTGTGTATATTGGATCATACTTGCAAATCTAGGATAAATCCACTTAATCATGGTGAATTATATTTTAA
ATGTAATTGTCAAATTCAGTTTGCTAGTATTTTGTGTTAGGACTTTTGCATTTATGTTTACCAGGGATACTGCCCTGTAAT
TTTTTTCTTATAGGGTCTTATCTGATTCTGGTCTGTTGGTAATGCTGGCCTCATAAAATGAATTTGGAAGTGTTCCT
TTCTCTTCACTTTTTTTGGAAGAGTTTGAGAAGCATTGTATTAATTTCTTAAATGCTTGCTACAATTCACCTTGTG
CCACATGGTCTGTGCTTTTCTTTGTTAGGAGTTTTTTTTTTTTAATTATGGATTCAATCTTCTTACTTGCTATTGGTCT
GTTGAGGTTTCATGTAATATATTTCCCTATCCCTTTGCTTTTCCAGCCTATGTGTATCTTAAAGGCTTAAGTGAGTCTCTTA
TTGTCCCAATATGAGACAGCATTGTGTTGATTTTTTTTAATTCATTACAGCCACTTTGTGTCTTTTGATTGAATAATTT
AATCCATTTATATCCAAGATTATTATTTATAGGTAAGGAGTTATTACTGCCATTTAAAAAATGCTTTCTGATGGGTTT
GTGGTCTTGTGCTTTTGTGTTGTTGCTGCTTGTGATTTTGTGATATTTGTAGTGGTGTGCTTTGATTCTTGTGTT
GTCTTTTCTGGATCTATTAGAGTTTTTTTTTTTTTTTTTCTTTGTAATTAATCTATGGGACTTTCAAAAAACATCTGTAGC
ATCTTTTAAATTATAATATTTTATTTTAAAGCTGATGACAAGTTAATTTCAATCACATACAAAAACTCTACACTTTTACTT
TCCCCCGTCATTTTGTGCTACTGATGTATGCTTTTGCATCTTTTTGTATTGTCATATCCATTAAACAAATTAAGTAACTA
TGGTTTATTTTAAATTTATTTTACCTTTTAACTTTTAAATTTAGAAATAATTTATACATCACCATTAACCATGAC
AAGTATACAGAATTTAATTATGTATTTACCTTTTCCAGTGAGTTGTATACTTATATATGTATTTATGTTGTTATTTAGC
AGCTTTTCAATCCAACCTTGAAGAATCACATTAGTATTTCTTATAAGGCAGGCTTTGTGGTAATGAACATCCTCAGTTTT
TGTTTGTCTGGGAATGTCTTTACCTCTCCATTTCTGAAGGCTAACTTTGCAGGGTACAGTATTTCTTTTGCAGGCTT
TTTTCTTTCAATGTTTTGAATATATTATCCATATTTATTTATTTGTTATCCATGTAGGCTTGCAATGGTGTCTGTGAAT
TTGAAGAAGCAAACAGTCTTTTGGTCTTTACAGGCTGATTTTAAACAACCTTCTCTTCCACCAATGGCAGACCTGTTATT
AGGTATGCAGATAGGCGTGGTTCCCTCTGGGTTTCTGGAGGACTCCCCCTGGCTCTCTGAGTATGTCTATGGGTAGGGA
GAACCGTCCCCAGATCAACATGAGAGAGCTTGGAACTAAGTCACTGCTGCTTCAGGGTCCACATCTGAGAGGACTTGCC
TCCAGGGAGTTGGATGGGCATACATCTCTGGGGACAAGATTGACCTTGGGCCAAGTCTAAGTGGGAATGGAGCAAAGTT
ATAGGGCCATCTCAGAACTGCTGTGGAACCAAGTTTGGCAAGCCTGTCTCCGAGAACATGGATGGGAATGAGTCCCTGA
CAGGTCGCTAAGTGGAGACAGGACTGCTCTCAGGCCACAGTTTTCAGTTTTAGGATATCATAGTTAGCAGACAGCTCTAT
ACAAAACCTACTCTTTTATATCTCTGCCCATTTATGTTTATCAATGTACATATTACAGCTTTTTTATATTTTGCATTTG
TTAACATAGTTTTATATTTATATTTATAATTAAGTTCTATACCAGAGTTAAAAATAATTTATGCACCACCATTTGCAAT
ATTATACGATTTTTATTTGTCTAAATATTTACCTTTTCCCTTTGTGTTGCTGTCTAGCATACTTTGTCTCAACTCAAAGG
ACTCCTTTTAGCAATTTTGTAAAGTCAAGTCTAGTGCTAAAGAACTACCTTAGCCATTGTTTATCTTTATTTCTCCTCC
ATTTTCAAAAATACAGTTTATGTCAGAAAGAGTATGCTTGGTTGACAGACTTTTTCTTTTCAGCACTTTGAATATATTGTC
CACTCCCTTCTGGCCTATAATGTTTCTCCTGAGAAATCTGCTAATGTCAATTGAAGGTCGCTTGACATGATGAGCCATT
TTCTCTTCTGCTTTTTCAGGATTTCCCTTTTGTGCTTTGATATTTGACAGTTTGTATTTCTTCTCAGATTTGGCAAGTATCTAGCCATT
TTTCCACGTTTGGATTATATCAGTGTCTTGAATTTGGTTGTTGTTTCTTCTCAGATTTGGCAAGTATCTAGCCATT
GTTTTTTTCAAATAAGCTTTTCTGTCTTCTCTCTTTCTATCATCTCTCTTCTCAGATTTGCAATGTATGTTGGAAC
ACTTGATGGTGTCCCATATGTTTCTTAGTCTTTCTTCACTTTTCTTCAATCTTCTTTTTTCTCTTTTGTATCTCTGGC

TTTCATAAATTAAAGTGGCCCTCTCTTTAGTTCATTATTCTTTCTTCTGCTTGATGGAGTCATCTGTTGAAATGCTCTA
GTGAACCTTTTCAACTCAATTACTGTATTTCATCTCCCATGAATGTTTGTGTTTCTTTTGAAGTTTGTGATATTCTCATT
TGTTCCCTGCATCATTTCCTAATTTCAATTAGTTTTCCTGCTCTCTCTCTAGCACATTGAACCTCTTTAATATTA
TTTTTAATTATTTGCCAAGTAACATAAATTTTTATTCTTTCTGTTGGTACCCTGGAGGTGATTTTGTTCCTTTGATT
GTGTGATGTTTCCCTGTTTCTTTGTGTGCCTAGTTATTTTTTTCTGTTGATTTGTGCTGATTTGAAAAAGCAGCCACCTCTT
CAGTCCTTATAAATTGGCTTCATACAGGGGAAGACTTTTACCAATTAGCCACATAGAGATTTTGGGAGCCTCTCCAGT
TTTGTGTTGTTTTTTTTTTTTTTTACCACGGGATACATCTTCTTGAATTTGTGTGTTCTTTCCAGTTAGAGTGAT
TTGCTTCTTTTTCTTCCAAGAGCTTTTAATCTCCTTCTCCGCTGGTGTCTGTCTGTACACTGCAGGTTCTGTGGCAT
TGCAATAAGCCACTGAGTTACCTTTTGTCTCTCTGCAGACCCAGGCATCCAAAGTATGTAGATTCCTAGTGCTCTGA
ATCAGGCAAGACAGAAACCAGTCTCTCAGACAACACTCTGAAAAACCAGAACATTGGACATACATTCCACTTCTCTCTT
TCTCTCCTAAGGGAGAAGTCATAAGGTGTGATTTATTTTTCTGATGACACCAAGCTGTGCTGGCTTGGAGGAAGGCT
GTCATGGTTGACGTGAAATGCCTTTTCTCATCTGTTTCAATGAGACTATTATTTTCTTTAAGTTTGCCTCAGGCACTGC
AACTTCTTGACTGGTTTCTAGACTTTTTCATAAACTTTTTGGATCATATATTATTGCTAAGTTGGCGTCTCTGGTGGAG
AATTAGCTCTCTCGCTGATGAACTCTACAGAATACTTTTACAGTATTTAATATTGCTCTTATTTTCATCTCACACGTAC
ATAGTCACTTTCTTAACACTTATATAATTGTTCTCTTCCCAATAGCTAGTAGTGTTCCTGTAACAATATTGACACAT
ACTAAGTTCTTATATAAGAAATATTTAAGGGAATTTTGTATTTTTCCACTAACTTTCTGTTGATTTATTGAAGGTAC
CACACTTTTGGTGTGTTTATGTGGCTTCATGGTAAATTTTATATGTATTAGAGCAAGACCGTAACCATGTTATATTTTA
TAACATGGCCTAATTCCTCCAAAAAGTAAATAAAAAAATAAAAAAGAGATGATTTTCTTGCAATAACATTAACTTAG
AAAATTATTCAAAGGAACATCAGTCTTGTATATAAGTCTTGGAAAAGTTGTATAGATTTCTTAATCTAAGTTCTACT
TATTTCTTTCTGAGCTTATTTTTTAAACATTTTGGTTTTTGTTTTTTATAAATGAGATGTTGGTGTGGTAATTTTAAAC
AACTGGTCTTTGATTTTATAAATAAAAGCCTTTTGCATATTTTACTTTTAAACTGGACAACTTACCTGACTATTCTTA
TTTTCAATTATTTTTTCTGAGTTGATTTTCTGGGTTTCCCTACATTAACTAGGTTGTAATCAAATAAGGATAAAGTTGCCT
TCACTTTTCTTATAGTTTATGCTCTCTATTTCTATTCCTCACATTGGGTTTACTGAAATTTGTAGAGTTTGTGAAAAA
TGGGGGCAATGTTACATTTGGGCTAAACTATGAACATTGATATCAGCTAAACCTGGTCTCAAACCTCTGAAGGATCCT
CAGTTAGAACTGAGAGGTCTTAAAGACGAGGTGGCTAGAGGGAGGTCTGCACACACATTGCCATGAGTCTCAGACCA
CATGAGACATTCTTTTTTGTCTGAAGCAAGGCTGGAGCCAGGCTAGATGGCTGTGGAAAGCTCCCATGGAACAGGCC
TGCTGTTCTCATTCCAGGCAAACTAACCTCTGTACAGTTGATAGTGTCACTATGGACAACTAACCTGTTTAAAGCTTCA
TTTCCAAATCTGTATCATGGGAATAGTAACAGTTTGTGTACAGTTTATAAGAATCAAGTAGCTACCTATACAATAT
ATGTAATAACAATAAATATTACTAAGTTTCTATTATTATCCTGATCTTAAGCATGAACCTATGCTTTACCAGTAGCTATA
ATGTTAAATAAAGTTTAAATATAAACATTCTTTTGATCCATAGTTTGTATTATCAAGGGGATATTTTGTAGTTATCTGAA
TATCAAAGCCAAAGCAAGCAACATTTCTGGCTCTCTGCATGTGGAAGGGAACTTAGCTTTACTTTGTCTCCCTTTT
CCTCCACAGCCCAATATTTGTTAGTTTATTCTAGATTTACATACCCAGTTTATCATTATAAATATATCATCACTTAAA
TGATGGTTTTAGGTTTTTCTTTCTAGTTTATATACATAGTTTGTGATTGGTATTGGTATTTAAATAAAACTTGAGAATGA
AGACAATAGATCCTTTGTATTTCTTTTAAAGTTGTGATTTGACCCCTGGTTTCTCAAGTGAGAACTTTTCAAACACT
TGAGAGAGTAACTGGCTGAGTTTTTACCTATACTTACTGTAGACCAATAATTTTAGCTGCTAAAAAACAATGTTAGTT
TCTTTTCTACACTTGGGATTCTATTACTGTATGTAACTGTGAAGGAAATAATTGACAGAACTCATGTTTTTCTTTATTT
TTTTCTCTCTACTAACAAAATAGAATTGACTTTATTTTTTAAAGTCAGCCAGGAATGTACAATGCTATTTACAA
AAGGTTAATGAACTCTAGAGTTGCAGATCGAGTTTCTGTTGATGAGAATATACAGAGTAGAATTTACTGAATGAGAGA
TTTTTCTATTCTTTTGGAACTTTTTTGAAGTTTGTGACTGAGTTATAGGAAATTTGGCTTTAGAGGACTTCAG
TGATTTCTGTCTCTTCTAATCAGTATGAAATCACAGCCTATATTTGGATTATGCTCTGTGAATGTTTGAACCTATCTG
TTATCTTTGTGTTAACTGAGGTAGAAATTTTCATTTTTATATAGAATTAGTTTTGCAAGAGTATCTTTTCTATATACA
AATATCCATTTGAAAATTGATTGTGTTAAGTCGATACAATGCCCTTTTCTATATTAAAGGACAGGATGTTTTATTGCCTT
GACTTGTGTTGTTTCTGTAAAGTTATTTGGGCAATAATAGCATTTCAGTTTTAAGATAAAACATACATAATAAGTAATGA
GACAAGAGGAAAAACATTTGGCATAAGGCTTAGAGAAATTTAAGGCTCATTTCATTATTGCTTTAGTGCATTTATTA
CAATTTTATGGGGACATGAAAGACTAATATATGGAGAAAAATGCTGCTATTGGCATATAATATGTTAAGATTGCAAATA
TGACTTTTAAATCCACTGTGATAATAGCCTATTAAATTTGTATCCTAGTCCCTGAAGAGTCACTAACATTATCTTGTAT
ACTACAAAATTAGGTACAGGGAACCTTTTACTTTTACAGAACTTAATGTTGCATCAAACTAAGTGGACAGGAAAAAAG
GAATGTGGCATTGGAAGTGATAAAACAAACACATCCTCTGCCTATGACTGTCTTCTTCTGACCTATCTGACTATTT
AACATGCTGACCTTTACAATGCTCTGCATAGTGTAGGCTCACTGAAAGCACTGAGTGTCTGAAATCCTTCAATCTTATT
TAAACAAAATAGGTGAAAATACTTAATCATGATGTCTATATTTGAAAGAATATTTGAACATGGGGAGAGACCCAAC
CAGTTTGTAGTGGCTGAAGTTTTTGAATTTTTATAGAAATTTCCCTATTATGTGTTTCACTTTATGCCTGACTTATAATA
ATAGTTACAAATACTACATTGCTAGTAACACCAATATCTAATACCAATTTCTCTTCTTCTAATTTCTTGCAGTTGAAGAA
ATGGAGATGAGTATGTCTATATGCTTCACTCTTTCTCAGCAAGATTTATTTAGCATATGTTTTGTTCCAGGCACTGGC
TAAGTGCTAGGGGTACAAAAGTTGTTTTGTCTCCCTTCTTCCAGATGTGTCCATGTGTCCAGGCTAACAGAGTGAGTA
GTCACACAGGCAAAATCATTCTCTACAGTTGTGAGGCTGAAGGCTGACTTGGTGTGATAAATAAAAGGCAAGATAT
TTGTATTCTATTGCTTGGATGATATTTTCACTTGAAGTAGGAGATTGAAAAGAAAAATGCGGCGGGTGAGTGGCTC
ACACCTGTAATCCAGCACCTTTGGGAGGCGGAGGCGGTGGATCACCTGAGGTCAAGAGTTTGAAGACAGCCTGGCCAAAC
ATGATGAACTCCGTCTCTACTAAAAATACAAAAAATTAGCTGGGTGTGGTGGCAGGTGCCTGTAATCCAGCTACTTG
GGAGGCTGAGGCAAGAAATCACTTGAACCTTGAAGGCGAGGGTTGCAGTGAGCTGAGATCATGCCATTGCAATCCAGC
CTGGGCAACAAGAGCAAACTCCATCTCAAAAAAAAAAAAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAATGGTTGAAG

140/375

GATAGCAGCTTGGACAATGCCTAGGTTTAAAGACAGTTAATTGAGGAGCCAGCAATGAGACTAAATGAAAATGACTGG
AGAAGCAGATAGACAGAAAAGCAAAAATAAATGTCCAATTTATGGGGTGATCTACATCTTTTTTTGTCTGCAACAGTCCA
GGTGTTCTCTTTTTGTCTGATGTCAAACTGGCTAGCACTTTCTTTCAACTTGCAAAAGTGTTATGTACTCCAGTAAACC
CTAAGTTCTCTGTTACAGCTTTGATCATATACTGGTGATTATCTGTCTATTATATTTTTCTCTCAAATGAACTGTAAGTG
CTTAAGCAAAAGGAGGTGCCTAATTCATCTCTGCATTTTCAGTACCCGACACAAGCATCAAAGGTAGTAGGTGCTCAAT
AAATGATTAATTGGGAAATTAATAGGAATGGAAACACAATTAAGATAGGTTGAACCTCTTTAGAGATATACACATAAAA
TAGTACTACCTGTAACAAGAAAATGCTAAATTTTTGTGGATTACCCCAACAGAAGATTATCTGTGGCTCGTGTACCCCA
AATTAAGTGTTTCTGATTGGCAAGTGCTCTCATGTAAATAATGATTAAGAAACCATGGCTTCTTCATCTTGTGACTC
TACCATCTTCAACACATGGTGAGGGGCTACAGAGGGGAAGAGAAATAGGGGGTTGTACTCACAAAATTTTTATGTGGCA
GGCCTGAAAGTGGCACATACACAGACCCATACACATTTCCCTTAACCTTATAATCAATGAGCATGTAATGTAACACTCACT
GACATCTCTATAGCTACCTGTAAGGGAGTCTGGAGATGTGGTCTCACTGCATGCCAAGAAAGAAACATTCTTTCTTGCA
ATGCCTATATATGTATATGTATAAATATATATATGTATATACATGTTTACATATGTATGTATATATATATGTGTGTATA
CATATACTGTATGTGTGTATATGTATATATATACACACACACACATCTTAAGGGGATTTTCTTATAGAAATTTTATTTT
TCCCCCTCTCTATATATATATGAAATAAATATCAGAGACTGTGAGATTATTAAGAACCACAGAAATTTATTTAACCCCT
AGTAATGTGCATGCCTGTGTTTTAAAGGCCATTAAGTAGTTTATTTGCTACTTTTGAAAGAAAAAAATTAACCAAAGA
AATTAATTAATATCTTGGATAAAAACCTGAAACAAAACAAAAGGAAAAATAATAATAAATTTAACATTCATCCATTG
TAAGTGCAATTATTATGGAATTGCTTACTTTAGGCATGTATTTAGAAAGAAATTTATGTCAGTAAAAAGCATAACATT
AAAGTTATTTGTCTGTCAATTATTCCATATAAGTTGGCTAATTTTGAATATAATTTTATTTTACTACAAGGTAGCAGG
TTCATATTACAGTTATTTCAATATGTGAGCATTCTTTTATTTTGATATTGCATATCTTGAAGCCGAATATATTTCTAA
GTCCCATCAATAGCAAGGTGAATGTGTATCATTTTATTTATGACTTTTATATACTTTTAAATTTGAAAAACAAGA
CATCTTTATTATAGGAATAACAGAAGCTCATAATTAATAAAGATACTAAAAACAAAATATTACCAATATTGCACAGGAG
AGCCATTTTAGAGAATTAGGATACATCCTTAAACAATTTGTTTTATGAATATAATATGTGACTTTTTTGTGTTTTGTGTA
TATTATTGTTTTATAAAAATGGGAGCACTCTATAATCTGTTCTTCCCACTCAACATTGTGTCTATTACATGATTACGTA
TTCTTCTACATTATTTTAACAGCCTCATAGTATTTTCATCATATGATGTATCAACATTTACTAAGCCAATCTTTCAGTAC
AGCAATTAGATTACATCCAGTTATTTGCTATTATAAATGAGCTGCAGTGAACATCTTGTGCTGCGATATTTGCCAAAC
AGTTTTATTAACTATGTCTAAATGTCAAAACCATTAGTTCTCAAACCTTAAATATGCACTGGAATGATACTGGTGACT
TATTCAGACTCATAAGCCCTACTCATAGAGATTGTGTTTAGGAAGATCTGGAATAAGACCCGGGAGTCTGAATTTTAGC
AAGCACCATCTATGATTCTAATGCAGAGGGTTTGAATGTCACATTTTGAGAAATAATGACTTGAGACATTAGAAATAC
TATCTTTTTTCCATCTTCTCCCTGCCATAATGCCATTTTCTAACAATAACATAAGATACTTATTGCTCTGGTGATTAGT
TTTACATCTCTCTCCAAATAAAGGCATTTAACCTCTTACCTTCTACCTGATAAGGTTGTTCTTTTATTTCTGAACCA
TAACTGATACACATTGATCTAGAGTGTGAAAAAGCCTCTTATACTGTTTTGGAATGGAAATGTTAGAATATAGCCCT
CTAGTGCTTTATCATTTTTATTGTAAAGATAAAAGTATTTATAGAAAGTGGGTTTTAACTAACAGAGTATAAGCATGAG
TGTAACCTTCATTTTTTAGTAGAGATAATTATCTCAAAAAAGTTACGTCTTGAGGCAGTTTTATCTAAAAAAGAAATGTCA
AAAACATTAAGTCATTCAACAGATAACCTCAGTTATATAAAGCATTTTTTGCAATTGCAATGCTAACACCCAGAGTAGGC
AGCTAAATGCTTATAAAAAGATGTTAACTTTGGCCAGCTATATTTAGTGCTACTGAAGCTTTGCTAGACTCATCCTTTG
TTCTTCTTTTCTATGTTTCATCCAGAAGAAGAGTATTACACATGTATTAGTCAGGGTCTCTAGAGGGACAGAACTAAT
AGGATACATGTATATGTGAAAGGAGTTTGTAAAGGAGTATGTAAGTCTCACACGATCACAAGGTGAAGTCCCAATAGGC
GGTCTGTAAGCTGAGGAGCAAGGAAGCCAAATTCGAGTCCCAAGACTTCAAAGTAAGTAAAGTGCCAGTGCAAGGATCC
AAAAACCCATCACTCTGTAGAAGCATGTTGTAACATTTGATGATTTCTATAATTCTCATCACACTCAAAGTAGGAAAGC
TGTTTTCACTCTGTGGCTCAAGGCCAAGAGTCCCTGGAAAACCACTTGTGTAGGTCCAAGAGTCCACCTGTTTTAAGAA
CAGGAGTCTGATGATCGAGAGCAGGAAACATCCAGCACAGAAGAAAGATGCAGGCCAGAAGACTCCGGCATTCCAGTCC
TTCCATGTTTCTCTGCTGCTTTTAAACCAGCTGTGCTTGACGCTGATTAGATGGTGCCTACCCACATGGAGGGTGGGT
CTGACTCTCCCTGTACACTGACTGAAATGTTAATCTTCTTTGGTAACACCCTCACAGACACACCCAGGAACAATACTTT
GTATCCTTCAATCCAATCAAGTTGACACTCAGTATTAACCATCACAACACATAAGTCATTAACCTTAATCATGACCTGTT
TCCAATCCAGGAATGAAGTTCTGTTCTTAGAGGAACCTCCTAAGTACATAAGTACACAGAGGCTCACTTTCCCAATCTA
AAAGCTAAGACTGTTCGAAGTGCATATGCTTTCTGTTTTTTCTATATTTGTTATCTCACAGAAACATTGATTTGCCAT
TGGTTCTTGCAAAATCAGTATTTTATAACTGGAGGTGGTGTAAAGGTTTATTTTGTATAACCTTTTGATTTTATCCCTA
TGGAGACTAAAGACCAGCAAGGTTAAGACCAGCAGATCTGGAACAGGTTATTATAGAAATTTGTATATTATGTTGTTGC
TAGCAAATGGAATTAATTGCAAGGAGATGATGGAAGAGATAGTATTTCTGATATCTCCAAGCCATTGTTTTTCAAATGT
GTTGTTCAAACCCCTCCGATTTGGGATCAGAGGTGGTGCATACAAAATTCAGACTCCCAGGTCTTATTCAGATCTGCT
GGTCTTAGCCTTGCTTGTCTTTAGTCTCTGCAGACAAAAATCAAGACATTATACAAAATAAACCTTAAGACCCCTTCC
AGTTATGAAGTACTCTGATTTTGTAAACCAACCAATGGCACCCTCTTAAGACCACCTGAGTAATTACTGGCAGAGCAGGGGA
TAAATTTCTATCCTCTCATTTAATGACAGATTGTCAATTCATTTCTAATGTTTATGTAGGGCTGCTCTCATCTCAGTTC
TGTTTTAATTTTCAAATGAAAATGTGAAGCTTATTGAGTTATGATCAATTAGTGTGTGTTCTGTTATTTTCTACTAATA
CTCACTCTGCCAGTGACTATACTTGTAAAGGTAGTGCAGCATGGTGGCTTTTAGCTCCAGTTTAACTAGAAAGATTT
GGGTTTGGATCCTGACATGTAGGGTGATCAATCATCTGGTTTCTTGGGACTGTGGGGTTTCCCTGGACATAGGACTT
TGAGTGTCAAATAACAAAGGTCCAGGCCAAGTAAGATGATTAATCACCCTCAGTCCATGTGGCTCTGTATGATAGG
TCTCTGGGTTTTTTAATGGGTAAAAAGCAAGAAAGTAACCTCATAGGATTTTAGTAAAAATTAATGAGAC
AGTATATGTAAAAACACGGCACTACTTAATAAAGACTCAGTAAGTATTAGTCATTATTATTGATGTTTTATAAAGCAAGT
AGATTCCTCAAAGCACAGATTCTCAGAATTTAGGATTTGAAATAAATGAACTTTCTTTTTAGCTTTTGACCTCTTTTTTT

141/375

TTGTTTGTTTTTTAAATCTTCTCAGTACCCCTTCTGTCTGTCTGTCTATACAACCTGGACAATACAACCCAAGGTTGGATA
GAGTCCACCATCTCACATCCCTTTTACCTTTTTTCAAGATATAAATCAGGAAGACAAAAATTTTCTATTTGGGAATCAAT
GTGAAGAGTGAGCATCAAAGACAGCATAGAGCTATGGAGAAAGGGGAAATTAGCCTGGATTATAATAACAGCTGCCATT
TTGTTGAGTGCAAACCTTTTGCCAGATATTGGTGCTTCAAATACCTTTATATATTTGGTCCACACAATGACTCCGAGAGG
TAAATATTATTATCTCAGTCTTCAGATGGAGAAACAACCTCAATGAGCCTAAGTGACTTGCCCCAAGATAGTTGTATAG
TAAGGAGTGTAATAAATGAGGTCTGGATGTTCCAAGCTCGATGAATGTCCAACCTTTTCAGCCAGCTGGTTAATTTTGAGA
AATATAAACTTCTTCACCTGTAAACTCAGAAGGGAAGGAAATTGCCATATATGAGTGCTAATCCCAATGCAAGTAATG
AACTATGCACATCATATGCATGATCTCATTTTAATTCCTGTATGTAAATATTAGTCCCATTTTTTATAATAAAGAAACAGA
AGCCTTAGAGAGACTAAGCAACACACTATCAATACAAATAGTAAAGTGGCAGTGCAAAGATTCAAAAACCCAACACTCT
ATAGAAGCATGTTATAACATTTGGTGATTCTATAATTCCTCAGTATGTGGATATAATAAATATTGCTAGAGTAGACTTTC
CAGCCATTTGGAAATAATTATTGCTCATGTGATAGTATATTTTCTCAACTAGAAATCAAAATATTAACCTTTTGACCTGG
GTTTACCTTTGCATGTGGATAACATGGATCAAATTTGCAAAATTCCTGCTGAGCTGTGACTTAAATACAGTTCTACTGGG
TCCTCAAGTTTCTTTTAAAGTCTTTTTTTCTTACTACCTCTCAGTCTTATAAAAAATTGGCAAGAGTATATCTGAGTA
AATGTGACATATGAAAACATATGTTTCAAATATGGCCTTAAATATGCAGAAAAAATAGGACTTTTCTTCTCTCTCTTC
ATGGGCATGCATGTAAGAAAGATATATATAAATATACAGTCATGTGCTATATAACATTTTAGTCAACTATGGACCATAC
ATACCATGGTGGCCATAAGATTATAACTGTATTTTACTGTATCTTCTCTATGTTTAGATATACTTAGATACACAAA
TATTTCCCATTTGTGTTATAATTGCCTACAGTATTTTACTAGTAAACAATGTACCATCTAGGTTTGTAAATACACTGT
GATGTTTACACAAGGAAATTTCTTAATGATGCATTTCTCAGAATGGATCATTATCAAGTGATGCATAACTGTATGTGTG
TGTGTGTAT
TCAITTCATAGAAGTTATAAAAAACATTTTGATTTATCCTTGATTTTATAGAATTCACACACAAAGCTAATAAATCTAA
GATTACTGAAGATGTTAGTTAACTGTTTTAACCAAGCCACACCTGGTGAACAAATTTGCTATTTTAAAAATAAATTTAG
ATTTTAGTTAATCAAATATTGTTTCACTGTTTTCTAGATAGCATTTTTCATGTATACATTTTACTTAATT
TCTTTCCAGGAAAGTATTAAGCCATTATGTAATGATAACAGTGTGATTTTGTGATTATATGTACTTTCTTGAATT
ATTACCTCAGGCCTCTGAGGAAACACTACATTCCAGTAATGAAGAGGAAGACCCTTCCGCGGAATGGAACCTATCTT
GTCCGGAGACTTTTCATGTGCAATATTAGCTTCCCCCTCTCGCCTTCAGACAGTTGGAACAAGCTGACTTGAAAAGTG
AATCAGAGAACATTCACGACCAACCAGCCTCCCCCTGAAGATTCTGCCGCTGATTGCTATCACTTCTGCAGAATCCAG
TGGGTGAGTGCCCTCAGATGTCATTTCCCCATTTTATATTTTAGATGGTGATTGTTGTCTGTGGTCTTTTGAGTTTTTG
TGGCTCATTGCTTGATTGAGTGGGAGAAACATGGGGTTTCTAGAGTCAAAAAAAGGATGAATTTCTCAGGTGACA
TTTCTATATCTGCAGGAGAAGACATTTTAGTGAAATTGTTTTACATGGAAGAGCTGAAAATGTATTGGTGAATGCTAAT
AAACATTTGCCAAAGGGCAGTTGTACTTGGAAAATTAATATTGGCCATATGTGACTTGATAGAAGACATTTTAACAAAT
GAGAACTAATGGACAAATACCATGTAGTGATACATGTCTAGAAACAATAGGAAATGTTCACTGATGCAAAATGAATTT
GGAATCAAGAATAAATGTTATGTAATTAGAATCAAAAGAAATATGCAATGGTATTTCATGAGTCTAAAAATTTTGCCCT
TGACATTTTGAGGTATTGCTTACCAGAATACTATTTAGCTCCAGTATAAGGTGATTTTATTTAGCATTAGTACTTAT
AGAGGAGTCAGCCACAGCCACGTCTCCATCATGTAACTTTTATTTCTTCTTGTGAGGGTATAATTTTGTGTTTTAT
TCTTTTTCTGTGTTGTTTACCAATGGAGTTTTTACATCTTTAAAGCAATGTCCACAGTTTAAAAATTTGTGAAAGAAAGTAAG
GATATTGGGCACATCAATTATTTGTTCTTGTGACCAGCTGCAATTTTAAAGAGCCTGGATAGAAAGGAAAGAGGATGAA
GCCAGTGGGCCATACATAGATAGACTCTTGAACATTTGCTAAAACTACAAGAACAAACAAATTTACTATGCTACAAATGT
GATGGTCCCACATTTCTGCAAGTTAAAGGCATCTCTGGGGAAAAATGTCTTTTGGATCTTGTGTTAAAGTTAGGAAGGTT
GTGCTCAGAGGAAATTTGGCTAGTAACTCAACTCAAAGATACTGAATTTAGCTGTTTTACTTGTATTGACAGCTTAA
GGGACCTGTGTTAGAAAAAGGTATGAGGAAAAATACTACTAGATAAATAAAGAAAACAAATATTCACCTTGAAGCAAT
GAAAAGAGGAAATATATTTTGTGTTCTGTGTTGTAATTGAACTATGTGTTTAAAGAAAGATGCACACACATTGATCAGA
CTCATACTAAAGCAGATGGGAATTTATATGACAGCTTGACCTGAACATTTTGTAAAAATGCTGTTCCCCCTGAAACTA
TTTCTCCTTTCTTTGGAAATAACATTGCTGCCGTTCACTCTGTGTAGAAGAGATTCACAGATATCAGGTGTATCCAGGG
ATCCCAAGATCACCTCGGGTTCAATGATTTGCTAGCAGAGCTCTCATAATTCAGCAAATAGTCATATTCATGGCTCTG
ATGTGTTATAGCAAAAGGATTCAATGCAAAATAAGCAAGGGAAAGGTAGATGGAACAAATCTGGAGGAAACCAACA
TAAGCTTCCAAGAGTCCCAAGTGAAGTAAGACAAGATACACTTAATTCCTCCAGTAATGAGTTGAGACAACACTTGTG
AATGTGTTTACCAGGGATGCCTTTACCAGGGAAGCCTATTAAAGACTCAGTACCTAGAGTTTCTACTGGAGGCCAGTC
ACTTAGGTACCTCTGCCTAGGATATACAACTTCCAGATTTCCAGAAGGAAAGTGGATATGCAGCATAAACCACATTA
TTTGCACAGACAGTTTAGGCAAATTGAGCCAGTCTTACCATTTAGAGAATGGTGGATCACTCCTGAAAGTCAGGTCTGC
TAAAGGCCAATGTTTTCAACAGGTCTTCTATATTTAATTGACACAGTCTGATTAAGTGTACTACACACCAGGTTA
TCTTAGAATAGTTATCTTACTTTCTTCACTGTGTGGAAGAAGAGATTATAATTAAAAATTAAGTCACTAATTTAAAG
CCCTGATATATTCAATTAGCTTTGGTATCTCAAAAATTTGGTTGCTTAACCATGATTTCTCATTTTGTGTTGTTAT
ATCATGTGCCCTTAAATAAATGATGCAATATACTAATATATCTCTATGTAGTTGGATATTGTGTGTAATCTAAAT
CTTGAGCTGGGCGCAGTGGCTCATGCCTGTAATCCAGACCTTTGGGAGCCGAGGAGGATTGACCTCATGAA
TTTGAGGCAAGCCTGGGCAACATGGCAAGACCTTGTCTCTATCAAAAAACAAATAAATACTGGGTGTAGTGGCATGC
GCCTGTGGTCCCAGCTACTCAGCAGGCTGATGCAGGAGGATCGCTTCAGCCTGCTTGAAGGCAGAGGTTGAGTGGAGTC
AAGATCCTGCCACTGCACCTTGGCTGGGTGTCAGAGAGAGAATGTATTGCTAAAAACAGTTTCCAAGTGCCAAGGAAC
TTCAGGTTCCGAATTGTCTATGTCCCAGCATTTCTGTTGATTCAATTCATTTCCATCTTCATTAAGATTTAAGAATC
AAGTACAATTGACCTTGAACAATACAGGTTTGAAGTGCACAGGTTCTTTTATATGAGGATCTTTTCAACCAACACA
AATGGAATAATAGTATTCCTGGGATGTGAACTCATGTATACAGATGGGCTGACTTTTCATATATGTGGGTTCCACAG

142/375

GGCCAATTGCAAGAATTGAGTATGCATGAATTTTGGTACATGTGGTAGACCCGAAACCAATCCCCCTACATATACCAAGG
AATGACTATGTAAGCAATGTCACTACTATTTACAAATTTATCCAATATTATGAAGAAAATAATTTTTCTTTTGA
AGATGGAACAAGGGTTTCATTTCAAAGAAACAATAGACAATAATGGCCAATCAACAAGAACCAAACTAAGTAGATATT
AAAGGTATTGTTATTACATTTGGAAGCCAGAACAAATTTGCGAATTGAATATTGAGGACTAGAAAATTCAGGAGTATAAC
TTTCTGGAATGTGCAAGCTTTGGAGGAGAAGTAGAAGGTAAAGTGCAGGGCCAGGTGCAGTGGCTCACGCCTGTAATCC
CAGCACTTTGGGAGGCTGAGGCGGGCAGATCACAAGGTGAGGAGATCAAGACCATCCTGGCTAACACGGTGAACCCAG
TCTGTACGAAAAATACAAAAAAAATTAGCCGGGCTTGGCAGTGTGTGCCTGCAGTCCCAGCTACTCAGGAGGCTGAGG
CAAGAGGATGGCGTGAACCCGGGAGGCAGAGGTTGCAGTGAGCCGAGATTACGCCACTGCACCTCCAGCCTGGGCGACAG
AGTGAGACTCTGTCTCAAAATAAAAAACAAAAACAAAAACGAAAGGTGAAGTTGGGCTTATATTCTGT
GCCATTTTAGTTAACCAGGAGCCCCAGATTCTTTACAGCTGTCTAGAAAGAGCTAATGGGAAATTTAGCCTATTTTAAAC
TGAGTTGTCTCCAGCCCATTTGCCTCATTATTAAAGGTTAGTATGCCCTTAAAGTCCCATTGGCCAACCTATACTGAGACCA
TACCTTAGCAATTGCAATCTTTGATGGTCAAGGCGACTTTTCATGCCCTCCAGATTTATTTTCTTTCTTTCTTAACA
TCATAGCCTTTTGCTCTTTCTTCTGGCATATCAGTATGCCAGATACTTTCTTTGTCAAGTGTGAGGAGTGGGTCTAGA
GACTTGTACCAACCCCTTTAGAAAGCCACAGTATGGCCCTGAGAATCATTAGTTTCTGAAAAAGAACTTTGATGTGCAGA
AATAAGTGTCTGATAGACAGCTATTAGCTTCTCATGAAGTACTTGGGTCAAGAGACTGAGTTCAAAGGACTTTTAG
TTATTACACTTTCATATTTCTACTTTGACTTTTTCCTCAAGCAATGCGAATGTGTTCAAATGTACACTTTTTTAACAA
TTTCTTTTGAGTATGCCAAACTGTTAGGTTGTGTGTATGCTGTGATTAGCTAGCAAACTTAAGAACTGTAAATGAACAGA
AAACAGAATTATTAAGACCTGGGATGCCTATAACCTGAATTCATCTGCCAGTTAACTTTCTGTACAGGGTAGGCGAAT
TCAGGCTTCATGGCTGTTTACTGACCTTCTCGAAGTAAGAGAGACAGCTATTAATGACTTGAATGTTATGAACGTGG
CATAGAAGTAATTTGGAAAGTCAGTTTTTCATATTTTCTCTCTAAATAATTTTCTATTACCTTTTCATAAAATCTTTTTTA
TTAAGGTATAATTTACATGCATTATACATCTTGAATTAATATGTATTTATACTGTCTATGTAATCACCATCCTATTTCTC
AACTGATCACTAAAGGTTATTTTGCTCCTCTTGGACTTCACATAAATGGAATTGTACTGTATGTACTTGTGTGTCTG
GCTTCTATTAGTCAAATTTTTTTTTGATATCCATGTTTGTGTATATCTCAGCAGCTTGTTTTTATTGCATAAATATAG
CATAATGTATTTATTTTACTCTCTTACTAATGAACCTTTGGGTTGTTTCTAGTTTGAGGGGATTATGAATGAAGCTGC
TATGTACACTTATACCAGTCTTTTTGTGAATATATGCACTCATTTCTTTGGGTATATTTCCAGGAGTAGCATTCTGA
GTCATAAGGAGGCAATATTTATTTTCACTACTGCCAACAGTTTTCTAAAGTGTGTACTCTTTTACCCTCCACCAG
CAATACGTAGTAGGTACAGTTGTTCTACATTCTCACCAACACTTAGTATTTTTCAGTCTTTTTCATTTTGGTCATTCTGG
TGAATGTGTAGTGGTATACACTGTGGTTTTAATTTACATTTCCCCGATGAGTAGGAATATTGCTTACCTTTTGATGTG
TTTATTTGAACATTTGGATATCTTCTTTGTGTTATGACCATTACAGACATTTGTTTCAGTTTTTATTTTACTTATTGATTTT
TGAGGGCTCTTTGTATATTCTAGACATGAGTATTTTGTAGACATGTGTATTATAAAGTGAATATTTTGTCTAAACAG
TGTCTTGAATTTTACTTTTATGTTTACTTTGAATATGTTGGTAATCCTAGGGACCTGTGAAATATGAGGGAAGTGTGCA
GCAGGGAGAGGAACTGTAAGGCAAGAAGTGGACCCACCTTAATAAGGGGAAAAACAAGAATGACATTTAACCTGCAGAG
CAATTTCACTTGGAGACAAGGACAGCTGGTCCCTGAATATTGGATGGTGGCAAATAAGACATCCAAGCACTAAGAGGG
CAGGCAGAGAAGAGTTGGAATGAAGCAACACAGCTCTTATGGTGGCTGATGGCCGGGTAGTGAGTAGACAAGAGTGGG
GCTCTGGACATAGATGGTCTGAATTTGAGTCTGTCTCCCACTACTACCATCTTGTGAAGGTACTTAACCACTCCAAG
TTCTTAATTTTAAAAAAGCAAAAGTAGGAATAATGCGAGCACCTACTTCATGGGTTTGTCTTAATGTTATACTACCTAT
CCCCATTTTTCACATATTGTGAATACTTAATATATAACATCAAAAACCTGCAACTCCTATGCTGGGAAAAATATTAGAACA
AATAATGTTTGTGTTGTTAATATTGTTTACTTATTGGAATTGGCTTCAGAGATACTCTACAAATAAATCTTGGGGTA
GAGATGGATGTTCTAGCAGATTTGGGAGTCAATCAGAAATTGGCTCCTGTTTCAGAAAGTTACAGTTATTATGGACTTG
TGACATTTCTGTTTCAAGTCTGTATCTGGCATCTTCCCGCACACATGTCTTGCTTTCAAGTGTGTTTCAAGTTATGTTT
GGAATGAGAATGGTGGTCTCCCTACTTCTGCTTCACTTCTTCCACAACCTTGCTGACTTCTAAATAGTTTCTGCTTAG
AATCCTTAGGAGGAATTAGGATCTCCTTTTCCAGCCCTATCTTGGGCACTGACTTACATTTCCACATGTGGTCCATGTGCC
CCTAGACAACTTAAGGAGAGTCTAGCTTGCCACACATGTGGAAATCATTCCCAGTTTACAGGTGGGAAGTTATGGGAAT
GAAGAAAATGTGGGGGAGGTAGCAATAAACTCTCTACTTACATTTTCAATTGCTGCATCTGCTATAATAAAATGAGAGCC
AAGAGCAACTTATTTCCCTTGTGACATGATGACACACCTCTGGATAGATGTATATTAGGGATATGGGTGGGTGGAGAAT
GTTACAAACACTTTCTCATCCCTAGTATCTTATACCTGTCTGAAGAAGTACACTGTGTACCTTCGTATCACTATGTCC
TATAAAAAAAGAAAATGAAAAGAATGTAAAAGAAGACATGGTCACTTTTGGGGATAAATTTAACTACCCAACAGAGAGA
GAAGAATTACTTTATTCATATAAGGGTTTCAATTTTACAAGGATCTTCCAGAAATATTTCCCTTGATTTGTGTGCTATTAC
AGAGGGACTGGTACAGATGCCAGTTAGACATTGGATTCTTTGACTAACCCTCTTCACTCTTGTGCTCTTTGAGTACAAA
CAGTACGTTAGAGAGAACATTAATAAAAGATTGTTTTTCAAGCAATTTATTTCTGAATCAAATCCAAACAGAAAATAAA
AAAGGAAAAACAGAAGGCTGGATCAGACACATCTGATCTTTCAAATTTGGCCCTTTTAACTTAAGAAGGTATTAAATGGG
CATTTATATTTTAAATAATTTGGATATAAGGGTGTATTATAAAGCTAGAGATTGTATTTTACAGTCTTACCATGAAGCCT
GTACCTTCATGTTTGTATGTATGTTTCAAGCTTTTAAAGTATTATCTAAGTTCTTATTTGAATGTTATATGGAAGATCTATA
ACCCACTAGGCAAGCTTCCCAAAATTTGAAAATAAAACACATTAATCATGATTGTGAAACATTTCTGTAGAAATATAGTAT
TCTTGAGCTAGATGAAATTTTAAAAAGTAATCAATGCCAAAAATTTGGGAAACAACTACTCCAATAATCTTGAAGATGCAT
ACTAAGCAGACAAAAATTGGATTCTTTTGGTTTTGATTGATTACATGCAATTTATGATTGTATGTTGTTATCTTAACTTC
TCAGGATACTCACAAAATATCACAAAGCCTTTTATTTTAAAGCATTGTTCTGATTAAATCTTATCTGTCTTTGCTTAA
CTTTGTAAATTTGTGATTATTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGTTTTG
TGGAGTGAATGGCGTGTCTCGGCTCACTGCAACCTCCGCCCCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCA
AGTAGCTGAGACGACAGGCATGTCCACCACACCAGGCTAATTTTTGTATTTTAGTAGAAATGGGGTTTTGCCATGTT

143/375

GGCCAGGCTGTTCTCAAACCTCCTGGCCTTATGAAATCTTCCTGCCTCAGCCTCCCAAAGTGCTGGGACTACAGGCGTGA
GCCATCATGCCTGGCCCCAAATTTGTGATTTTCAAGATTAAAATTAGATTCTAAGAGTGATGGAGCACTTTAAAATATC
TGGATAAAAATCATCTTATTTCCAGAATCAGGGCAATTCTTGAATCTAATCTAAAATAAGCAATGTAAAATGCTGACT
TTTTTCTCACCTATCATAGACTCTCTAAAAGGTTTATGCTATATCTGCCATGCCTTCAATTTACAAAATAATATGATCA
TGATTAAACTCCAGTGTCTTTTTCAGGTTATCACAGTACCTTTTCATTATTGTAGTACATTCTGGTGTCCCCATTAAGG
ATATGCTGAATGGACTGATACTATAACCACAGTATTTTACTTTATATCTGTGTGTGTCAGTAAAGCAGCATGTACCAGGGGA
AGGTTTACCTTTAGAAATCAAAGGCTTCTATTTTACCAGGCTCCACGTTGTTAAAAACACTAAAGAGGGTGACAACCTT
CTGCGTTCACCAACATCAGAGCATCTAGTCCCTATTTTCAAACCTTTCTTGTGCCAATATGACTTGTTTTAGTAATAGA
GATTGGTTGGGGAATCCCATATTTTTTAAGGCAAACCCAAGGAAGCATTATTTTACCGTGAAAAGTGCTAGGGCACA
TACTATATTAAGCACAAGGCAGAACCTCAACAAAGCCCTTTCTTTGATTATTTCCATCACTCAATAATAATTGTTCCAC
TCCATAGATAGTTTCTTTGCAACAAACACTGCCCTGGCTGACCATCCTTCTGTAATGCAGAACTGTGAATCACTGAAGT
GTTTAAGGAGAGCTTATAATTTCTTTAAAAGCCTTTTTATTCTGTTTTACAGTATTTGTGTTTTATGAAAAAATGCAGGT
AAAAATATTCTGACCAAATTTGATTGTTTAAATTATTATGTATTGCATAATGTATAATACTGATTCAAACCTTAACATGA
CCAGAGTGCAATTGCTTGGAGAAATCCAAATGAAAAATATATTTTTCAGTTGAAATTCAATTAAGGATGAAGTAATCAAA
CTTTTTTTCTCTACAAATGAGCACTACAAAATGGCAAAAGTTTTCTTTAAAAAATCTGTATATAGAAAAAACTATAG
AAAAATATATCACTTCTTGGGTAAACACACTTCCCCCAACCAAAAAAATTTCTAGGTACTTAGAATTTCTTTCTAG
AACTTAGAATTTCCATATTATTTTTTTCATCCATTTCTCTCATTTATTAGAAATCTGCCCTCCAGTTGAAAGGAAGTAGA
TGGAGCCGGGCACCTTTTAGATTATTTCAAATCTGAGGAATTTCAACAAAAATAAATGCATTATTAGTTATGTTTGAAG
TCATGTGTCACACATATCTGGATGATGGGTCAACTTTGTTTAAATAGATTAGCATCATTTACACTGAAGTTTCGTGGCTCT
GAGCTTCGTTAAAGTGAGACCTTTGTCCACATTCCCAGGAGGGCTTTTTCTCAGGGGGTTCTGAATTTTACCATGACGT
AATTCCTAAACAGTTGTGATTAGTGCTAAATGTTATCATAAACACACACACACACACACACACACACACACACACCTTGTGTGTGAAA
GCTAGATATAGATATTAACAACTTTAGAATACTTGTTTTTTAAATATGTAATTTATAATATATAAATAATATTTAGAAT
ATAAAGTTTATAATACATAAATACTATACTTCTTTACCATTCACTTTCTAGAACTTTCCAGCTTTTGATCACAATTTT
CAAGGGTGGTCTCCCTCTTTACTCCTCTACTAACTCTTCTGTGTCTCAGTTAACATGTGATTTTGGCTTTCTTATTTCT
CCAACATTATTTAATTCAGACTAACTTTATTTCTTGAAGGTATATACCAGACATACCTCGGAGATATTGTGGGTTTCTCAGA
TCCAGGCCACTGCAATAAAGCAAATATCACAATAAAGCAAGTCACACATACTTTTTTGGCTTTCCAGTGCATATAAACT
TATGTTTACACTATATTGTAGTGTGTAATAGCATTGTCTCTAAGAAAACAATGTACATGCCTTAAGTAAGAAATACTTA
ATTGCTAAAAAATAAATGCTAACAACCATTAGAGCCTTCAGCAAGTCAGAAACATTTTGTGCTGGTGGAGAGTCTTGCT
CAATGTTTCATGACTGCTGACTGATCAAGGTGGTGGTTGCTGAAGATTGGGGTGGCTGTGACAATTTCTTAGAATAACAC
TACAGTGAAAATTGCCACATCCATTGATTCTCTCTTTCATGAACAATTTCTCTGTAGCATGCAATGGTGTGTTGACAGCA
TTTTACCCATAGTAGAACTTCTTTCAAATTTGGAGTCAATCCTCTTAAACGCTGTGCTGCTGGTTTTATCTACTAAGTTTAT
ATAATATTTTAAATCCTTTGTTGCCATTTCAACAATGTTTCACAGCATCTTTACCAGAAGTAGATTCTGTCTCAAGAAAC
CATTTTCTTTGCTTTCATCCAAGAAACAACCTCTCATTCTTTCAAGTTTTATCATAAGATTGCAGTAATTTTATTACAAC
TTCAGGTTCCATTTCTAATTTCTAGTTCTCTTGCAATTTCCAGCATCTGCAGTTACTTTCTCCACTTGAACCCCTCAG
AGTCATCCATGAGGGTTGGAATCAATTTCTTCCAACCTGTTGTTAATGTTGATATTTTGACCTATGCCTATGGATCACA
AATATTTCTTAATGGCATCTAGAATGGTGAATCCTGTCCGAAAGTTTTCGACTTACTTTGCCCTGATCCATCAGAGAAA
TAAGTGTCTTATCATAGCGATAGCCCTATGAAATGTATTTCTTAAATAATAAGGCTTAAAGTTGAAATGACTCCTTGGA
ACATGGGCTTCAGAAATGAATGTTGTGGTAGCAGGCATGATAACATTAACTCTTGTGCATCTCCAGCAAAGCTCTTGA
GTGACTAGGTGCATTGTCAATGAACAGTCATATTTTGAAGAAGATCTTTTTTTCTGAGCAGTATGTCTCAACAGTGGGC
TCAAAATATTTAGTAAACCATGCTGTAAACAGATACACTGTCTCAGTCCTTATTTTTTTTATTATAAAGCACAGGCA
AAGTAGATTTAGCACAATTTCTCAAAGGCCCTAGAATTATTGGAATATTAAATGAACATTGTCTTCAACTTAAAGTTACC
ATCTGCATTAGCTCCTACCAGGAGAGTCAGATTTTCTTTGAAGCTTTGAAGCCAGGCATTGACTTTTCTCTCTAGCT
ATGAAAGTTGTAGATGGTATCTTCTCCCAATAGAAGGCTATTTTGTCTCCACTGAAATCTGTTGTTTGTAGTGTAGTGC
TTCATCATTGATCTTAGTTAGACTTTCTGGATAACTGTGCACAGTTTATACATCAGCACTTGCTGCTTCACTTCACACT
CCTTTTTTTTTTCCAGCTTTTATTTTAGGTTTCAAGGGTATTTATGCAGCTTTGTTAAATGGGTAGCTTGTGCACCTGT
ACTTTTATGTATTGGAGATGGCTTCTTTTCTTTAAACATCATGAACCACCTCTGCTGGCATCCAACTTTTTCTGTGCA
GTCCTTAACTCTCTCAGACTTTCATTGAATTAAGAGAGTTAGGGCTTGTGTTGGGATTAGGCTTTGGCTTAAAGGGAATG
TTGCGGCTGGTTTGATCTTCTATCCAGACCACTGAAGTTTTCTCCACATTATCAATAAGGCTGTTTGGCTTTCTTGTCA
TTTTCTGTGTTCCACCAGAGTAGTACTTTTAAATTTCTTCAAAGCTTTTTCTTTGTATTACAACTTGGCTAACTGGTAC
AAAAGGCCCTGGCTTTCAGCCTGTCTTGGCTTTTGACATGTCTTCTCCTCACTAAGCCTTATTATGTCTAGCTTTTGACTTA
ATGCGAGAGACCTGTAACCTTCTCTTCACTTGAACACTTATAGGCCATTGTAAGGTTATTAAATGGCCTAATTTCAAT
ATTATTGTGTGTGTCAGGGAATAGGGAGACCTGAGGAAAAGAGAGAAATGGGGAATGGCCAGTCAGTGAAGCAGTGAGAA
TACATGCAACATTAAATCCATTAAAGTTTACTGTCTTACATGAGCATGTTTGTGGCACCCCAAAATTAATAAGTAAACA
TCCAAGACCACTGATCAGATCACCCTAGCAGTATAATAATAATGAAAAGTTTATAATTTCTGAGAATACCAAAA
TATGACATAGAAACACAAAGTGAGTACATGTTATTGGAATAAATGGTGCCAATAGACTTGTGTTGATGCAGCATTGCCAC
AATATTCAATTGGTAAAGCACAATATTGTGAAGTGTGATAAAGCAATGTGTTAGTCTGTTTTGCATGGCTATAAAGGA
ATACGTGTGACTGGCTAATTTACAAAGAAAAGAGATTTATTGGCTCATTGTTTAGCAGGGTGTCTGGGCAAGGCACCA
GCATCTGCTTGGCTTTTGTGAGGCTTCAAGGAAGCTTTTATTTCATGGCAGAAGGTGAAGGGGGAGCAGCTTTGTGATG
ACAAGAGAGGGAATAAGAGAGGGGGCAGGTGCCATATTCTTTAAACAATTAGATCTCACAATAACTCATGACCACAGGG
AGGGCACCAAGCCATTTATGAGGGCTCTGACCCCATGACCCAAGCATCTCCACTAGGGCCACCATCAACATTGGGAAT

144/375

CAAATCTCAACATGAGATTTGGAGGGTATAAATACCCAAACCATATCAAGCAAAGCACAATAAAACAAGTATGCCTGTA
 TTTATACACATATTACAAAACAGAAATTA AAAACAATAAAATCATACATGCAAGGGATTCTGGTAAATATACTGATCCCC
 TCAATCATGCATTAGTCATATATTAATGTATTCACTTTATATTCAACCAACAAATAGTGAGAGTCTGATATTTGCTGTA
 TACTGAGGTATGCACTGGCGACCCAGGCTCAACAAGACAAAACACAGCCTTTTCTTTTACAGGGGATTGAATCAAGTA
 GGGCACGTGCAAGAAAATAGACCACTATAATCTTGT'TTGTTCATATAATGTACAAATATGACTGCAGACAAATGGAGA
 AATATGAAATCTCACTGGGGAGCAAACCTCACTTTGGCTTGTGAGGAACCTAACACCTAACCTGAGACCAAAATAAGATGG
 TTCCAGGAAGAGAGAACAGCAGGTCAAAGTCCAGGGATGAGATTAAAGTAGAGTGTCTGCACTTAGCTAAATAAAAACT
 GCTAAACATGGCTAGACCAGAATGCCAATTGAAGGTACAGTTGATAAACTTACCATTAACTTTTCATGTAACCAATA
 TGTGAGGTTTTGTAAATATTTCCAGTATGCTAAGCAGCTATGATATAAACTGAAAAGGCAAACAGTTGGATTATTCC
 AAAATTGGAAAGCAGGTGCAATATAAGAAAAATAGGGCAAGGGATTGTAAGGTATTTGAAAGAAAGTGATAGAAATGAT
 GAATTGTGGCAACTTAGCTGGTTATGGAATGAGTGAATATAAGAAGATACTGATATAGAAAGTATTCAAGGTCTCTAG
 AAATCTCTATGATGTCAAACAGGTGAATTAGAATAAAGTGAAGACAAAGATAGATCATATTTGGAGGACAGAATGAA
 CTTTAAGATGTAAGTGCTAGAGGTAATTTAAGGTATGTTCAAGACATAGAAGGGTGTGAGGGAAGGGGTGACTGCCCTT
 GGAAAGATGTAGCTGAGGAACTGAGAGATCGGGGCATGAGGTGATGCCCTCCACATCAACATCAAAGTCAACCCAGGACT
 GCAGCAGGATTCAAGCTGTCAAGATGACAAAAAGGTGGGCAGTTTTTCACTGAATGAGAACTGACCAAGGGAGTGGCA
 GAAGTCAGAGACAAGGAAGTAGAGTTGATTGGCATAGATGTCAAACGAGAAGTTTTTACAAGAAGGTGGAGGAGTAAGT
 AAAAGTGAGTAACAGGAGAGACCCATTTCATCTTGGGACCCAGAGAGGGCATTGAGAACCAGAGTACCTTACCCTGA
 ATCCACCACAGGGAAGTGACATCTTTAGCGAAGAGTCAAATTTGAGAGAGGTTAGGATCTGGGATGACTTTTTTGGTGGC
 AAGGCTGAGGATGAAGTGAAGTCTGTTTGCATGGGAAAAGGGATCCAGAGAACTGATTGAATAATATGGAAGAATG
 AGAATGGGAGGATAGACAGGGGAGAGAAATCACAGTGCACATGGGGATAAGAAGTTGAAAGAACACAGGGAGAGGAAG
 AAGCTCTGTATCAGGTGGTTGTCTGAGATATGATTATGAAACAGCATTCCAAAATATTTTCAATAATTGGTCCACCTGT
 CCTCTGACTGATGGGTGTTAAACCAGGGAACAAGAAGTTGAGCATAGCTAGTAGGTCTTTTGGAAAGACCATAACGTTT
 GTCCTAGTCCAGTAAGTAGGTCTGCAATGGTGTCTTGGGTTCCCTAGTACATTTTCAGCATCTATTGGAGAATAGGAGC
 TTCCTGGTGTTCAGTACTTCTGCATCTTCCAGATTACTCAGCTGTTTCCAGATTTTATTACAGTCTCTGGAGTATGGAG
 AAGGATCTGATTTTTTAAAAAATATGAATTATCATTTTTCAAAGTATTAGTTTATTTTAAATAATTTTTATATCTAATCTC
 TAATATTTTGCCAGCAATAATAACATCTTAGGTATTTTGAATTAGCATTTGAGTTTGCTTTTGAGAATTTTAGTTCTTA
 GAAATAATAATTGAATTAAACACTATTGCTTCTTATATATTCTTAAATACTATTTCTGGCATTCAAGCATTATTCAG
 TTCGTCATGCTGCCAATTTTAGCAATAAAATAAAGAATAAAATTTGAATTCAATGTGGAAAAATTCTATTTGTAGAAAC
 ATTCGCTGTATAACGGGGTTACTGTTGTGACCTTAGTGAAACAACAGAAAGGCACGTGCATACGGTTTTGCCCTTAGCT
 TGGATGTAACATATTATTGTCAGACTTTAAGTCAAGCAACCTATGATCATGCTAATTTTTATTAAAGGTATTTGATA
 GAGTTGTATGATTGAGACCTGGAACCAAGATCCTTGATGTAATACATATGTGCACACAAATTTTTTATTCTCTCTCTT
 TGGTGACCTTGTCTGGGTCAATTTTTTTGTTTGTGTTTAAATTAACACTGTTTGAAACAGTATCTGTGACTAGAAATTTG
 GCAACTGTAGAGTATATCATATGTACACAGTGCCTTAGCAAAGGGTTTTTAATTAAACTCAGTGAGGAGACCAAGCAG
 AGGAGCCTTCATTTGTCTTAAGAAGAAATGTCAAGGTAAATTGATTTTCAGAGGATTATCTGCAACAAATAAAGACCAA
 GACTCATATCTTCTTATTTTGGCTTATAAATCTGGTATGTTCTGTTCAATATCCACTGAAAAAACTGAGATGAGAGT
 GTTCTTATAAACTCTATATGTCAAAGCATCCTTTGCAGTTGGCAAACTGAATGAATGACAGTGAAAATGTATACTTA
 TGGATTATGATATAGTCATTAAATGATTATTATGATAAGTATATGGTAACATGGAAGTATTTAGAATGTTTTGAGGAG
 AAAAGCAAATATACAAGTATATCCAGGTAAAGTTAAACACTGCAAAATATATGCCTGCATGTGGCTGAGAACTGGA
 AAACAATGTGAAAATAATTTGAATTTTTTGATTTACAAAATTGTGGTTTTTTTATTTTTCTCACATTGATTCTATTAAT
 GAAAATAAGTGTTTTATCCAATCAATAAAATTACATTAAATTTATTTATTTTACAATTTCAATTCATACAAATTCATC
 TATTGTGTCTTAGTATATGACAGACACAGTTTGAGGTACTGGGAATATTTTATATGTAGATTTTAAAATTCATGAACT
 TTTGTTTTTTCACAGGCAATCCAATAGGAAGTTTTGGCAACTATGGTGGGAGGTAGGGATACTTGGGCCTTTCAGAAATC
 TCCAGATCACTTTGTATAACCATTCTCTGTTGGTGACCGACTCCCCAAAAAAGATCACCAGCAGAACCAAGTGAAACT
 AAGTATTCATCTCAGTGAAATAAGGGAGGACATCACCTTTAAATTAGTAGTATTTTGGAAAGGGGAAGTAAAGGGAAG
 ATATTTGTAGAGTTTATAGCCAGGTCTGGGAGCTGATCTTGCAAGGTGGAAAAATGGCTGGCATTAGGCAGAATTTA
 GAGCCTAGCAGTTCTGGATTAGTGGGGTCTCTAAGAGCAGTGAGGTCTCAAAGTGAACCTTGATAAGTGAACCTGTTAG
 TCTTATTGAATAAGCTGGTTTACAGCCATTACAGCCTTATTTCCAAAAGCAAACATTTCTGGAGCAAGTACCTAAGT
 TATTTTGTCTGGTCTCCATGTGCTCAGCATTAACAGGCATTTAAACTTTGACTCCAAATTGTTTAGCACTGGGACA
 GAAAAGTATTTTGGTTTTTCACTTTTACCTTCTTTGTGAGCGACCTAGGTTTGATCAACTCATTGGCTGACAAGCCGGA
 TCCTTTGTCCCTTATTTTATTTTTTTAGACTTATATTATTGTACCTTATTTGCTTGGAAATTTAGGAAACACAGTCTCT
 TGGGATAGCTGGGGGATGAGAAGTCAAGAGAGGTAAGGTCTTAGGGTAGACAACCTGGGTAGATACTGGGCTACTCAGT
 ATCCAATCCTCTTCTGT'TTGGGGGAGTTTCAGAATAGGTGAGAGAAAGGACCTAGCCTTCCACTAGGGGAGTAGGAAT
 ATGCATTCCTCTGCATGCCCTCTGGCAGACAGAGGGAGGGTCTATAACCTCAATGTAGTCAATCTGATGTTCTTAGC
 CAGGACTTTGAATCTTGAGGGGATGGCTCAGACCATCACATATGCCACTATCGAGTGGAAGGGCCAGTGGCATCTGTTG
 TAGCTGCTGACAGTGTGGCGAAGAGCAGTGTGTGCCAGCAGGTGAGGAATAGGGTCCAGGCAGACTGATCCAGCCTC
 CCAGCTGCTTATTATCTTCACTGGATTCTGCTCAAGTCTGCTTCTTCAAGCTCCCTGTTTATTCTGAGTTCTATCCTAT
 ATTCTTTTGATGGATTCTTTTCTGCTTATGTCAATCCATCATTTCTATTGTTTGCAAATCACAGCCCTTGATCACTC
 TAGAAACTAAAGTACAGAAAGTGCCCTGACTTTGCTAGAAGTTTAGGTGTAAATTAGTAGTAAAGTTAGTAAGGAAAA
 ACCAAAGGGGAAGATTGAATTTTATTTTAATGCATTATTTTTTTTACATAAAAAGATAACAAAAGGAGGGTAGTGAAGAG
 AAGAGTCTCTTGAGATGTCCGTGGCAAAGTTTTTAAAGCTCTCAATAAGGAGACAAGGACTGGGCTTCATTGCAATTAT

145/375

TCCCTTTTACTGTTGAAGCTGGTAGGCTTACAATGGACTCCTAATGAGAGTGGTTTGCCTACAATTAATTAAGTGCA
TGACATTATAAACTGCATGTCTCTTCCCTCTGGAGAATATTCTTCTATATAAGTGCTATTTTGTTTTAAATTTCTCTCT
CTGTCTCTTCCCTCTCTGTTTCCCTCTCTTTGTCTCTCTCTCTTTTATTTATTTATTTATTTATTTATTTATTTATTT
AAGTTTTAGGGTACATGTGTACATTGTGCAGGTTAGTTACGTATGTATACATGTGCCATGCTGGTGCCTGCACCCACT
AACTCGTCATCTAGCATTAGGTATATCTCCCAAAGCTATCCCTCCCCCTCCCCCACCACCAACAGTCCCCAGAGTG
TGATGTTCCCCCTCTGTGTCCATGTGATCTCATTGTTCAATTCCCACCTATAAGTGAGAATATGCGGTGTTTGGTTTT
TTGTTCTTGCGATAGTTTACTGAGAATGATGATTTCCAATTTTCATCCATGTCCCTACAAAGGACATGACCTCATCATTT
TTTATGGCCACATAGTATTTCCATGGTGTATATGTGCCACATTTTCTTAATCCAGTCTATCATTGTTGGACATTTGGGTT
GGTTCCAAGTCTTTGCTATTGTGAATAGTGCCACAATAACATACGTGTGCATGTGTCTTTATAGCAGCATGATTTATA
GTCCTTTGGGTATATACCCAGTAATGGGATGGCTGGGTCAAATGGTATTTCTAGTTCTAGATCCCTGAGGAATCGCCAC
ACTGACTTCCACAATGGTTGAAGTAGTTTACAGTCCACCAACAGTGTAAGAGTGTTCCTATTTCTCCACATCCTCTCC
AGCACCTGTTGCTTCCCTGACTTTTTAATGATCACCATTCTAACTGGTGTGAGATGGTATCTCATTGTGGTTTTGATTTG
CATTTCTCTGATGGCCAGTGTAGGTGAGCATTTTTTCATGTGTTTTTGGCTGCACAAATGTCTTCTTTTGAGAAAGTGT
CTGTTTCATGTCCTTACCACTTTTTGATGGGGTGTGTTTTTCTTCTGTAAATTTGTTTAAAGTTTATTGTAGATTCT
GGATATTAGCCCTTTGTCAGATGAGTAGGTTGCGAAAATTTTCTCCATTTTGTAGGTTGCCTGTTCACTCTGATGATA
GTTTTCTTTTGCTGTACAGAAGCTCTTTAGTTTAATTAGATCCCATTGTCAATTTTGGCTTTTGTGGCATTTGCTTTTG
GTGTTTTAGACATGAAGTCTTTGCCCATGCTGTGTCTGAATGGTATTGCTAGGTTTCTTCTAGGTTTCTTATAGGT
TTTAGGTCTAACGTTTAAAGTCTTTAATCAAAAGTTGTCCCTGAAGGAAAATTAAGTCTGCTGTAGTCCACTGAGAAAG
CTTCTCTTTTAATAC'TGGAACATATCTTTGTCTAACTCTCCCTCACACCTAGTGCTAAATTTATCAGCGTTGTTCTCTGA
TACAAACATTTTGAAGACAATCGTGAGGAAAAAGATGAAAAAGTTGCATTTAACTTTTGTACAGGTGTCTTGTCTCT
CCAGAAGTTACTGTCTTTGTTGTAGTGTGCATGCTCAGTACAGGAGTGTGCATACATGTGTGAAGTACTTGAGAAGTGTA
TTTGTCCGTTCTCACACTGCTATAAAGAACTGCCCTAGACGGGGTAATTTACAAAAGAAAGAGGTTTAAATGACTCACA
GTTTCAGCATGGCTGGGGAGGCCCTCAGGAACTTACAATCATGGCAGAAGGGGAAGCAAACCTTCTTACGTTGGTGCA
GCAAGGAGAACTGCAGAGCAAAGTGGGGAAAAGCCTCTATAAAACCATCAGCTCTCATGAGAACTCACTATCACGAGAA
CAGTATGGAGGTAAC'TGTCCCATGGTTCAATTACCTTCTACCAGGTCTCTCCTGTGACACATGGGGATTATGAGAACT
ACAATTCAAAAGATGAGATATGGGTGGGGACACAGCCAAACCATGTCAAGAAGTATTTTCAAGAGACAAGTCATTTCCCAA
ACCTTATCATCAGGGTCAAGACCTGGCAGGTGAGACATTAGCAGGTGAACACAACATTTCTCAGAAACCTTGGAGAGTAC
TCTTTCCCTCCAGGCATCTTCTTTCAACCTTAATATATTCTATTCAATTATATTACAGCTTTTTTACCTCAATTATAA
TTCCATCTTCCAAATTTGTTTTCTTCTCCCATCTTCTCCTCAATAAAATATCTATTCTTCAGATAGTCTTCTTTGT
AAAATAGAAAGGATCTACAAAAGCCATTCTTTGTGAGATGTGAATCATTTCAAATAAATTAATGCCTTGTCTAATGTG
AATGGTGGACTTGTGAAGAGAAGTGGGTAGATATTTGAATTTCTGAATGCTTTAGAATATTAGTTGCACATGCAGTAAT
ATTTCTCTAGCTTTAGAAGAAATGGTTGGCTTAAACAGAAAATAGTTTACAAATAGTTTACAAATAGGTTCTGGCATCA
ATAATAGAAATATTAGAAGAACTACATATTATCAAGATGCTTCTCTTTTTTTCGGGGGGGGTGCCTTTTCTTCTCT
TGATGAACACAGTACTCTTTCTTCTTTGTTCTTTTATCTTCCATCTCAAATTTGTCAATAATAAATTTGAAGAATGGAGAA
TAATACATTATCACGTGCCAGACCTTATGCTAAACACTGGATATGTTATATTGTGTTTCACTCAGGATGATGCTACG
GTAGGTACCATTATTATCTTATTTTACTTATAAGAAAACAGAAGCCTGGAGAAGTTAAACAATTTCTCAGTATCAGAA
AGAACCAAGATCAAATATCTAGGTTAAGGTATTTTATCTTAACTAGATATGCCAGAATATCAAATCTAGGTTTCACTA
TTATTTTGTATTCTATCCAAATTTCTAAACCTGCTAATGATGGAGGGCTGTTATATGGTTCTAGCTTTATATATTTTTT
TATTTCAACTTTTATTTTAGATATATGGGTATTTGTACAGATTTGTTACATGGGATTATTGCATGATGCTTAGGTATGG
TATATCCCATACCCTGATAGTGAGCATAGTACAAGATAGGTAAATTTTTTAAATGCATCCACCCTCCCTCTACCCTCTA
GTAGTCCATGGTGTCTATTGTTCCCATATTTATACATATGTCCACGTGTGCTGAATGCTTAGCTCTCACTTATAAGTGA
GAAATGTCAATATTTGGTTTTCCATTCTGTGTTAATTTGCTTAAAGAATATGGCACCCAGTGGGCCGGGCGCAGTGGCT
CACACCTGTAATCCCAGCACTTTGGGAGGTGAGACAGGTGGATCACCTGAGGTGAGGAGTTCTAAACCAGCCTGACCA
ACATGGAGAAAACCCGCTCTCTACTAAAAC'TACAAAATTAGCCAGGCGTGGTGGCGCATGCCTGTAATCCCAGCTACTCG
GGAGGCTAAAGTAGGAGAAATGCTTGAACCCAGGAGGTGGAGGTTGTGGTGGAGCTGAGATCGGGTCATTGCACTCCAGC
CTGGGCAATAAGAGTGAAAAC'TCACTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAARGCATATGGCTCCAGCTCCATTCTAT
GTTGCTGCAAAAGACATGATTTTATTTCTGTTTGGGGTTGCATAGTATTTCTATAGTATATATGTACCACATTTTCTTTA
TGCAATCTACTATTGATGGGCACCTGGGTGATTCCACATCTTTGCTATTGTGAATAGTGCAGTGATGAGCATATGAGT
GCATGTGCTTTTTAGTAGAATATTTATTTTGTGGAAAGTATATACCTGGTAATGGGATTGCTGGGTCAAATGGTAAT
TCTGTTTTAAGTCTTTGAGAAATCTCCAGACTGCTTTCCAAAATAACTGGACTAATTTACATTTCCACCAATGGTGTAT
TAAGCATTTCCCTTTTCAGCCTCGCCAGTATCTGTCATTTTTTGTGTTTTTATAATAGCCATCTGATGGTGTGAGAT
GGTATCTTATTGTGGTTTTGATTTGCAATTTCTGATGATTAGTGACGTAAGCAATTTTTCATATTTTCTGGCCACTT
GTATGCTTCTGTTTCATGAAGCCCTTTGCCAC'TTTTTAATGGGGTTATGTTGTTTTTGTCTTATTGATTTTGTAAAGTT
CCCTGTAGATAGTGAATAATTAGGCCATTGTCATATGCATAGTTTGC'AAATATATTCTTCCATTTTGCAGGTCTTCTGTT
TACTCTGTTAGTTTCTTTGCTGTGCAGAAGCTATCTAGTTGGCCATCTTGGCATCTAATCTTTAATTTTCTTTCTAAAA
TATTTGAATGTTTTGCAATTTCTGACTGAAGTTACTTCCCTCTTTCTGAAGAAGGCCCTGCTGACATCAATAAT'TATCT
GAGAGTGACATAAGCTGACTCCGATTATGCCAAAGTAACCTTACGTGGTATGAAAAGAAAATGAAGGTGACTATGATT
CCTGGGGCATTGAGATTCTGAGAAAAC'TCCAGGTGAGCTCGCCATAAAAAATTTCCACACCTGTAGTTTAAATTTACCA
ATTAGGAAATATATATTTGGGGCTAAATGGTTTCTGATTTGTGGCCTGAAAGAAATAATGTACTTTTAAACAACTATA
AAAGTTCTCTGCTAGGAATATCTTAAATACAGTGAAAATCTGCCTTGACAGTGGACAGTAAGTTAGATTTTCATTGTTGT

146/375

AAATTGGCACCATTAACTAAAACCCCTTGTCATTCAAAATAATATGTATTGTACACATAACACTAAGCTCTGTATTATTA
CTGCCACAGATTATTGCTTTAACAGTTTGAAAATGATTTTGTAGAAAATTGACTTTGTACAATGCTATATTAGAGTCTGT
TAATTGATGAGAAAACCAAACCTCAGATGACATTTGCAAAAATAAAATTGGCATCAGTTGAAACATCTGTACCATTTCCTC
TTATTTAAAAGACATTTTTCATCTGGAAAATGACTACTTCGATTAGCCTCAGATCACAACCACAAAATAAAGTTGTCTA
TGGGTGGCTTCTTATTTGCATTTAAATTATTATGTTGCAGCATTTTGTATGCACAAGCAAATGGAAGATTGTTTTGAAT
GACATAGGCCTATACACCTGAGAGAGAAATATGTCATCTACAAAATGTAAAAATATAGGTTTTGTAAATGCCTCTGAA
AGGATTATAAGAATCTACATTTTCCCCTCCCTCCTGGAGTTTGTCTTTCTATTAAAGGCTCTAGACGAAGAAAAGCTCTA
ATATACTTTCCCTGGAGGGGTCTAGAGACAATGAAGCATAATAGGATTTGAAGTATATTGGATATAAAATTCATGTGAT
ATCCTCAAGTAGAGAGATGTTATTTTACTGTTCTTTAATCTTTACTGTTGGCGATAATTGCCTTTGTAACTAACTTTA
TGTTGTAACTAGTAGCGAACCAGAGATTGAGTTGAGAGGTGGGGGTAAACAGATGAGATCCTCATTGTGTAGGGCTCCA
AGGGCTGTGAGGCAATGGAAGGGCTGACCTTGCTACCTGGATGGGAACAATGCTGTTATCATTTTCATGTGCTCCTG
TTTGAAGATGAGTTAAACATCCATAAAAACAAGTTAGACTAAGGGTTGTCACTACAGCCTGTGGGCCAAATGCTGCC
TGCCACTTGTTTTATAAATGAAGGTTTCTTGGAGCTTGCACTACTACTGCAGAGTAGAGTAGTGGAGATGGAGACCATT
CGGCCTGCAGAGTCAACAATGTTTAAATATCTGGTGCTTTACAGAAAACCTTTGCCAAGCCTTGATTTAGACTTAGTAAC
TTTAGTAAGAAGTTACTGACTGCACAAATTACCAGGATATTTAAGCTTGTAAGTATTAAAATACCATAACTATCTGCT
TCTTGTGGCAGGGAGGGGGCCAAGGAGAGGTGAAGTGGTTATAATGCTCGTGCATTGGTTCTTCATTACCAGAGTGA
TTGTGCGCCCTCTCTGAAACAGGGATAATGCCAGGTACTCAAGATACAGCAGTGAGCAAAAAGAGGCATAGTGCCTTCC
TTAATGGAGATATGCATTGGAGTCACATAGCATAATAATGTTGACAAATATCCCTGCTCTCATGGATCAAGAGGTTAGA
GTTTTAGGGTAACCATGGAAGATCTCACTGAGAATGTAACCTTTGAATAAAGGATTAGAGGACTTGAGGAAGCCAACCAT
GCTGCTAGAGTTTCTCTGCAGAGGAAAGGGGAGTGATGAGATATAGGTGAAGGACAATGTGAGCCAAGATTGTTTTTTT
TAAGTTGAGGAATTAACAGCATGGTTGTATGCTGAGGGGGACAATTCAGTGGAGAGGGGAAAATTGATGTTGCAGGAAA
TTGCTGGGATAATGTCTTTGAGCAGATAAAAAGGGATTGATCCAGTGTACAACAGAAGGGACTAGTCTTGGTTTTGGAT
CAAGGACAGTTTATCCATAGTAAAATAAGAGAACGTAGAGTATATGGGCACAGATGCAGGTCATTGGGTAGTCTGGTG
GTTGAAAATTGTAGAAGTTCTTTTTTAAACCTTTAATTTTTCTTAGTATGTGCAAGGCCCTGAAGCAAAATAGAGCA
TGGTATAATCAAAGAATTGAGAGAAGAAAAACATAATCTAAGTGTAAATTAAGCAATACCATGGAGCCAGATGAGGCTG
ACGAGGTACACAGGATAACAGACGTACGCAAGACTAAGAATATGGTAATGCTAAACCAATTAAGAATGGGGTTAAATCAA
ATTTGCTTTTTTAAAAAAGATGACTGTGGCTACTGATAGAGATTGGATAGGAGAGTGCAACAAGAGTTTCTGTGGAGA
GACCAATCAGGAAGCTACTGCAGTAATTCAGGTGGGAAATGAAGGCWTCATGGTCTAGAGTAGAGGAGTGGGGAGAAG
AGAAATGATCAGATTTTGAGAGATATTTAGAGGCAGAGTAGATAGCTTACCTCATTATGTTTGGGTATAGAAGACAT
TGCCTATGTAAAGACTGAGTAGAGAAGAGAGCCTAGGAGTAGATGTGGACACTCAGGAGAAGGATAGATCTCGTTT
AGAACACTGAGTGAAGAAGCTGGGTATTGTTAAAGAAGAGAGCCAACTTCACAACCTGCCTAGCAGTGAAGAAGCAGAT
CAACAAAATCATATGGTGCGGAAGGGATACTTGCCATTAGATTAGTCCAGCTGAAGCCAAACGCTGGTTGCTTCTGAT
TTTTTTAAATCCTATATAATATATTGGTTAATTTTTATTTAAAAAATTGAACCTTTTCATTCTCATAATGAGACCAAAGTA
AAGGTCAAATCTTAAGAAGAGAATGGGTGAGAACATAGCAGGCAGATTGTTGTTTGGACATGATGTCAATGGACACTTC
AGTTGTCTATGTTCTAGGCCCATTACATTGGCCTTTCTCTTTTGAAGCTTCTCTCATGGAACCAAGTGCATTTTATATC
TGCATCTGTTCCAAATATGGGTATAACACAGACTCTGTGAGTAGCCTGCAATGTGTTTCCCTTCCACATATTGCTAGAT
AACTCTGCTTATAAAAATCTGCTTGCAAAAATCATAGAATCTGCAGATCCTGTCAAAAGAATTACTATTAGATGAAGTT
AAGAAATGACTGTAGAAGTAAAGAACAAGAGCTGGTCTTAGGAGTCCATCCCTTCATCAGTCTAGGAGGGTTGGGAT
CTTAGAGGCATTTTTGAGCTGAAAACCTCAAGGCAGGAAACAAGCCATCCCACTCTGAATAGGGCTGTGTTTCTCACCTG
AACAGTGAGAAGAGGGTGTATATTTTCTAATAAAATCCCACATTAAAGTTAGACAAAACTCTGTATAACTATGGAATA
GACTTTACTAATGGAAGAGTAATGTGAAAAGCTAAATAGGAAAATTTTAGGCACGTATTTTCACAATAGATCTTGCTG
TACTTGGGGGAGGCTTGTCTTCTTGATTACTAAGGTTAACTTAGTGCTTCAGAAGCCAGCCCGTTTTTATGTTCTGCTG
TTTTCTGATTTTGGTGTGTCTTGATGCCACTGTGTTCTAGTAAAAATTCCTTCAATAGACTGCCAGGAGAGCAGACC
AGGGAGTGTGAGTGTTTTGTGCATGGGCGAGCACATACAGATGTTAGGTGACAGTGGTTATTTCAGTCATGCTTTCAGAC
CTGGAGAACAGTTTCAGGTCAAATCTCCAAGTCTGTGGAATGAAGCTTTGGGGGAATTAATCAAATGTTACTGAAAGA
AAAGGGAAATCAAATCTGACTTCCACCCCTCTGAGATTTTTTGTGAGGACACAGAATGAGAGCATAACCTTCAGGTCCA
GAGTGAATATAGAGAGATCTTCCACTGACAATATGCTATCAACAAAAGCAAGGTAGAGAGGAAACGTTGAGCCTCAGC
AACCTGTAAGTCAAGACCCCTCTCCATCATCCCTAGATGCTTTTGTCTGTCTATTGGGATTGTGTCCCTTTCTATAACAC
TGTGACTTCTTTGGATCTCCACAGCCTGACTGTGTTTACGTTTCTCTCTCCAGTCTTTTAGTTTCTCTACAGAGCTGG
TGCATTTCTGTGGGGACAGAGCAGCTGGAACCTGGGCCCCGAAGCTGGTTTCAGATATGGAATTCCTTTAAGAGCAAAAA
TAACAATTACTAATATAATACAAGCCCAATACAAGTGAATAGTTAAAAGGAGAAAAGATATCACTATGAATTCAAATT
TTAAGTTAACATATATCCCACTACCACAAAATATTATAAATCATAACATTTTATTAACTGCCCAACCCAATTTTATAA
TACATTTTCCCCTATGCTTGGCTAAATATTCTTTGATTGTCTCTTTAAATGACACTGAAATTTGAATATTTTCTATGTA
GAGATTGGGAAGATACTTTAAACTTTTCTTCAGGATTGTTGATTTTTAAAAAATTATTAATAGTTAGAAAAGTTTTGTA
ATGTCATATACATTCCTAACATTGTTATCAAATTTTGAAGAAATTTTAAATTTTTTTTTTTCATGTAGGAGCGTAAGATTT
CAGGGCATTGATGTGGTGTGTGTGTTTGTGGGTGTGTATGTTGACTAATCTTACATACTTGTATTCTTTTACCAGTTT
GTCATCGAAGTGTCACTGCATTTGTCTAGATTTTAGATCCTCTCTGTCAATGTCAACATTTTATATCAAATCAGAAAA
AAATTAAAAATTGTTTCAATGTGTGTTAGTTTGATTAACTCCTTTTCTTATTGAATTACCCTTTTGGAGATGATCTGGAAAAAATTGTTA
CAATGTACTGTCTGATATCTGAATAATTTCTATTGATTTAACCCTTGGCTTTACTGCATTTTCTTCATACTCCAATAA

147/375

TTGTATTTGAAATTTTCTTATTCATTTATATTTTTAGTCCTTTAATCTAAAAAATTAAGGATAAAAAAGCATCCTTCA
CGTATATTGAAATCAGGAGTCAGTAATTTTTCACTTGTTTAAACATTCAAACATCTTTCTAACTCACTTCTTGATATT
GGGATAATTTTAAATTTTACTTTTGCAAATTTTGCCAAAGCATCTGGCTAAATAAACACACTTGCCAGGGCACC GCCCA
GAGCCTCGGCAGGTACTTATGCAAGCAGAGAGCCCTGCAGCTTTGGCTTTTATCATCTTCACCATAAACCCATCTCTGA
TTCTCCCTTTTCCCTACAGCACTTTCCACTAACAATACACATACACACCCATATCACACCTATACTATTTATTTTCTT
TATGCCCCTTTCTGTAGTATTTATATCCATAGCAATTATCACCATCTAACACACTACATATTTTGCTTATTTATTTAT
TTATTGTTTATCTCTCCACACTAGAATTTAAGCTTTGTAAAGGCAGATGTGTTCCCTTCTCTGAGGCTGCCATATAAATG
ACCACAAATGGGTGGCTCGAAACAGCAGAAATTTATTCTCTCTGAGTTGCAGAGAGAATTCTGCATCTCAGAATACAGT
TCAAATCAAGGTGCTGTAGGGCTGGTTCCTCTGGAGGCTCTGGGGGATGATTGCTTGCATGCCTTTTCATAGCCGCCA
GTGGCTGCTTCCAACCTTGGCACTCCTTGGCATGGGGCTTCATGAGGTTCAATCTCTGCCTGTGTCTCTCGTGGCCT
TTTTTTTTTTTTTAAATCTGGGTCTCTGTGTCTTCTCTTTTTCTGATCTTAAACATAATTTCTTGAGGAAATCATAAATC
ATTGGACTTGTAGCTCACCTAATACATGGTGATCTTATCTCAAATCTTTACCTTAATTACATCTGCAAAGATCCTTT
TTACAAGTAAGTTTACATTCTTATTCGGGTGAACCTTATCTTTTGTGGACCACAGTTCAACTCACTACAGAAGTTACAA
TTTTTCTGTTATGCTCACTGATGTGTCTCCAGCACATAGACCAGAGCCTGGAATGTAGTAAGTGCTAAATAAATATTTG
TTGAAGGAATGCATTGAGAGCCTATAGTGCCAGATGCTGAGGTAGGTACTTAGAGCACTGCAATTTAAATATTTCCCTAA
CTATAATTTATCTTCTCTTTTCAATTCACATATAAATATTTTTTTAAATTTTTTAAATTTTTTATTTTAGATTCAAGTG
TACATGTGCAGGTTTGTACATGGATATATTGTCATGATGCTGAGGTTTCGAGTTTCTATTTGATCTTGTCTACTAAGATAAT
GAACATAGTACCCAATTGGAAGTTTTTTCAGCCCTTGCCCTCTCTCCCTCCCTCTTTTGTAGTTCTCTTGTGTCTACTG
TTCCCATCGTTATGTGTATGTGCAAAATTTAGCTTCCAATTATAAGTGAAAACATGCAACATTTGGTTTGTCTGT
TCTGCATTCACTTCACTTCACTTCAATGGCTTATGGCTGCATCCATGTTGCTTCAAAGGATGTGATTTTGTTTTTTCT
TGTGGCTGTGTAGTATTCCACAGTGTATATGTACCATATTTTCTTTATCCAATCCACCGTTGATGGGCACCTAGGTTGC
TTCCATGTCTTTGCTATTGTAAATAGTGCTGTGATAAACATACATACAAGTGCAGGCATCTCTTTGGTAGGATGGTTTA
TTTTCTTTGGTATTATACCCAGTAATGGGATTGCTGGGTCAAATGGTAGGTCTAATTTTAGTTCTTTTGGAAATCTC
CAAATGTTTTCCACAGGGTCTGAACCTAATTTTCACTTCTGCAAACAGTGTACAACCATTCCTTTTCTCTACCGTCTC
GCCAACATCCGTTATTTTTTACTTTTCAATATAGTAGCCATTCTGACTGGTGTGAGATGGTATCTCTTGTGGTTTTG
ATTTGCATTTCTCTGATGATTAGTGATATTGAGTATATTTTTCATGTTTATTTGGTTGCTTGTATGTCTTCTTTTGAAAAG
TGTCTGTTTCATGACCTTTTCCACATTTTAAATGGGTTATTTGGTTTTTTTCTTATTGATTTGTATAAGTTTCTTTATGG
ATTCTGGATATTAGGCTTTTGTGTAATGCATAGTTTGCAAATATTTTCTCCCATTTCTGAGGTTGTCTGTTTACTTGGT
TGATAGTTTCTTTTGTCTGTTCAGAAGCTCTTCAGTTTAAATTAGATCCTAATTTTCAATTTTGTTTTTGTATGCAATTG
CTTTTGGGGACTTAGTCATAAAATCTTTGCCTAGGCCAGTGTCCAGAAGAGTATTTTCTAGGTTTATTTCTAGGATTTT
TATAGTTTGGAGTCTCCCATTTAAGTCTTTAATCCATCCTGAGTTAAGAGGTAGGGGTCCAGTTTCATTCTTCTGCATG
TGGTTAGCCAGTTTTTCTCAGCACTGTTTATTGAATAAGGAGTCCCTTCCCCCTGCTTATTTTGTGACATTGTCAA
GATCAGATGGCTGTAGGCGTGCAGCTTTATTTTGGGGTCTCTATTCTGTTTCATTGGTCTATGTGTCTATTTTGTAC
CAGTATCATTCTGTTTTGGTTACTGTAGTTTTGCAGTATAATTGAAGTCAGGTGATGCCTCTGGCTTGTCTTTTTTCT
TTTAGGATTGCTTTGGCTATTCTGCTCTATTTTGGCTCCATTTTACATTTTGAATAGGTTTCTAATTTCTGTGAAA
AATAACATTGATACTTCATAGAAATACTGTGAATCTGTACATTTGCTTTGGGCAGTATGGACATTTTAGTGATATTAG
TCATTCAAAGCTATGAGCATGAAATGTTTTTCCATTTGTTTATGTTGTCTATCATGTGTCTATTTTTCAGTAGTGTTT
TGATAGTTCTCTTGTAGAGATCTTTCACCTTCTTGATAGTCTTAGGTATTTGTGTGTGTGTGTGTGTGCACCTGCGTGT
GTGTGTGTCTATTGTTAAGTGAGATTGTGTTCTTGATGTAGGTCTCAGTTTGAATGTCAGTGGTATATAGAAATGCTAC
TGATTTTCTGATCATTCTTTTGTATCCTGAACTTTACTGAAGTCATTATCAGGTCTAGGAGCCTTTTGGTGGAGACAT
TAGGTTTGTCTAGGTAAAGGATCACATCGTCAGCAAAGAGAAATAATTTTACTTCTCTTTTCTATTTGGGTGCCTTC
ATTTCTTTCTTTTGCCTGATCGCTCTGACTAGGACTTCCGTTACTATGTTGAATAGGAATGGTAGGAATGGGCATCCTT
GTCTTGTTCCTATTCTTAAGGGGAATGTTTCCAGCGTTTGCCTGTTTCAGCATGATGTTGGCTTGGGGTTTTTCATAGAT
GACTCTTATTATTTTGGGATATATTCTTTGATGCCTAGTTTGTCTGAGGGTTTTTATCATGAAGGGATGTTGGATTTTG
TCCAATGCTTTTTCTGTATCTATTAAGATGATAATATGGTTTTTGTTTTATAATTCTGCTTATCAATTCATATAAGTTC
TTTGAAGATGAAAACCTCTGCTCTTTATGGTGTTTGTACATTTTGAATTTCTTAATACTGTGTATGTAGCTGACAAACA
TAAATAGATATGCAATGAGTAAGAGAGTCATTTGGGATCACTGCTGATTTAACTTATCTTGCCATGAAAGCATTTCTGT
TCTCTTTCCCATGCTTGGTAATATATCTTTTTTGAAGAAACACTCTTGCCAAAAGAGAATGGCATTATTACATCCAAG
GGAAATATTATTTGCCCAAGAGTGTAATAATGTATGAAAGAAATATGTAAATAAAATCCTATATGTAAATCTAATAAT
ATCAAAGTTTAAATGATGAAATTTGTCAAGATGATTATAAAATATCACAGTTAACTGTATATTATATTATGTTTCTTG
CCATTTGTATGCTAAAAACTTATAATGATTTGAATGTACAAAATCAAATCGGGAGAAAAGAAGATAGATCAGAGCCT
ATTACCAATAATTTATCTTTTACCTCCATAAATGTTTGTCTAGAAATGCCAAAGGCTCTAATTTGTCTATTTTAAATGTAC
TTCAAAAAGCATTCCCAAGTTGCCTATTTACTCTGTTATCTCTATAAATCAGGAAACTCTCCAGGCTTTCCACTGTG
AATGTTGTATGGAATTGATAGAACAATTTCTTTTTTATGTTGTGTACTCATTTACCATTAGTTACTTAGACAATAAACTT
AGAATGACAAATCTAAGTCTCAAAATATGAATGAAATTTCACTCATTTTTCAGAAACAAAATTTAGCATCACACTCTCTT
GAGCAAAATCTCACTAGAAAAAAGATAGAGAAAATACGTTATAGCATTTTGAAGTCTGCTACCTCATGTCTTTTATCT
GCTTTCTAATTTTATAGAAAATAATATGCAATTTAAATATGACTTTTCTTAACTTTACATAATTATAATTATTTATGAA
AAATATGTGTAAATAATACATGTTATATTTCTTTTTCTCTATACTACCAACAGCCACTCCCATTCATGTACTCATATTA
GAAGGGAAGAGCTTTGAATATCATATATAACATTTTTCAGATAAAAGAACTTAGGTCCAGAAAAGCTAACTCTTTTGTCTG
GTGACTAAACATACACATACGTGCACTGACACACACATATTAAGTTACTGAGTTGATAGCAAAAAAAGTGCAACT

148/375

TTATATGGAAGTAGAATTATGTAAAAATGTCTGTCTAATTCTATACTGGAAAAATATCTCATATGAAATGGCTCCTTCAT
ATGACAACACTCAGTATTCAAAGCAAAGCACAACTAAGAAAGTTACTTTCCCAACCAAAAAAATAATAATAAT
TAAAAAAGAAATGTACCTATTGTGGACTAGCTGATTGGATACCATGGCCACAGCCCTGATTTTCAGTAAAGACATAGT
TTCAAGAATGTCATTAGATGGTTTCTTAAGTAGGGATGTTGTTATTTTAGCAAAAGAAGCCTTTTGTCCTTGTCACA
TCAAAACACAAAGAATTCCATAAGTCAGTGCCAGTCTTGTTTAAATGCCTAAATATCTGGCCACATATATATTTATGT
TATGTAAATGTTATTGCCTTGTTTTTCAGAATAAGAATTTAGAACATTAGAAATTGACTTTTATAATGCAATTTTTTTC
AAACTCTTTTTGGCTTTTCTCTAAATCTCAAAATTTGTTTCAATTTAGGCAATGGAATTGGACTAGTCAGTCTAATTTA
TTTTTGTTAGCCAGTTTCACCTCTCAGATTCCAGGGAACAAAGCCAAACTATAAGATATCTACTGAAAACATTTGTAAG
AAATAATTAAGAGCAGACTCTGAATAAGCATATAAAATGAAGCATTTTTATCACAAGCTTTTATAAAATTTTTTAAAACT
GTGTTTCATTTAATTCTGAAAGCATGCCTCTTTTGTAATTATGAAATACAGAAATATTTGAAATTTCCCCAGTCATCTTGG
CTCACAATAGAAACATTTGGTTGCGTTTGGTTTACAAGCACACAGGGGCTGCTGCTTTTGGTTCTGTGTAAAGCCCA
TACTATTTCTTGCTTTTTTTTTTCCACAATGAGTATGTGGGTGCTAGAATGTTATCGAAATATTTTGCAAGACATGAATC
TAAATGAGCACTCTGCTATGGTTGCAGTTACAGTGCAACCCCATCAAGTTGCTAGCATTGGACTGATAGACAAGGTA
GGGGCAGCCAGAGAGTCTGAGTTCTGTGAGGAACTGCAAGGGGGAAGGGGCTGTGTTCAGGGGCTGTCTGTCAGGCTG
AAGGTTGTTATTAGTTGTGTGGTTTCTGGGCCCACACAAACTCCACCTTCTCCATTAGAAGTCAGTGTCCTGTTGAT
GTGACCACCTGCTTTATTATTGGGGTCTTCTGCCATCTAAGACCTGGGCCACTCACCTGGATTTTGAACCTCTTGCTT
TTGCACTGATACCTGATTGAGAATCCGATCAATTGCCTTTCCATCTTTGCTGTGTGGGACCAGAAGTACAGAGGTTTA
TAGGTGAGCTTTTATTCTTTCTCCAGAAAGAGTAAATACAGTGTGCTGTCAGTGAAGTGAACACACCTCCTGTT
TGAACACAAAGGAATTTAGAGAGGAGTAAATACAGGCGCTTAAATTTATCCCTTTAATAAGAGCAGCATCCCCA
CCAAAGAACATGTCGATCTTACTTGGTGATACATTTCCCTATGGAGAAGGGAGATCTGATTGAAAGAAGACCGAAGGGC
AGGAGGGAGGGAGGGTTGTAAAGCAAGGATGTGGCTCTGTGTAACCGGGGATAAAAGCACCTTGCTTAGGGAGATGTTG
TGAGAAATACCCAGCACCTCTGCTACAAGAGGCAATCCTTATAGCTGGCTCTTGCCATGGTTAAATGATTGGGAC
AAAAATATTAAAAAGAAATGCTCCTCGCTATACTGGTTGGAATCCTCAGGCTTGAGTAGGAGGAGCTGAGTAATCC
CTGCAGTGTCGGAAAGCTGGAATCCTGAGTAGATTGAGGCCAATTTGTGTGATATTCCAGGGATTCCCTCCCTATTT
TGGGCAGAGGAATGGATTTGGATGGGGCAGCATGTTCTGTGAGTTGGCAGGCACCCACTGAACAGAATAACTGATTTG
GTACCCAGACTGCAGATACCAGCTGAATTGCCAAGCAGATATTGCCAGGGAAATACCTGCTAAAGTTGAAATGATCA
CTACTTGGATGGGTTAAACATTTACCAGTATCACTAGTATTATACATAGTGTTTTAGTTTTCTGAAAATGTGCATGC
ACATGAGAAGAATAAGTATTAAGATGAAACTCCAGTCCCTCTCCAGAGGCACAACCATGGTTACCAATTTCTTATATA
AAGTATATATATAAAAGCTTATATAACCTCTTCTTTTACTTATTAATACTTGCATTGATTACTTTAGAATGGGCAAGT
AAAAACTAGTTTAATTGTAATAATTGTAATCACTCTAATACATTTTCTTATTCTGAAATATTTGCTTTGTTTTAACTT
TAGCAATTATGAACCTTATACTAGTCTAGGAAAATTAATCTGTAAATATTTCTGTTGGAATCTCAGATTTATAATTA
AAATTATATAGGGTATGTTACATAATTTCTGATCAAAGATTTAGATTAAACAAATATGTTTGTGCATTTATTACATCGT
CAGCACTGTCTGTGCCTCACTCAATACGTGAACCTTATTTAATGTAAGTCCACTAATTTCACTGTAGAAACCAAGGAG
AAAAAGGTCTGGGGCACATACATGGCATTCTTGTGAATCTTCTGAAAGTGCTCTCTTACCTGACATGGTAGGGATATC
CTGAAAGGTGAAGAAGGGAACCTTCAGGGCAGTGCCATTTCGACATAGGCTCTTTGAGAATAAGAATGAATCTTTATTC
ATATCTGTGGTCCAGTAGTAAAGTATCTTTAGAGCTGCCATCTCTAATAATAACGGCCATTTCTGACTTGTGTTA
ATCTTCCGGCTTTTTTCCCTACAATTTTAGGTCTAAATCTTCCATGTAAACACACTCTTTTCATGCTGAATCCTGTCTCA
AATAACTGCCAAGATGTTTGTGTTAGTAATCCTGAAATAGAAGATTGGCTTCTATGCTAAGATAATTATTGGGAGAATCT
CTTCTTTTAATAAATACCTGGTTCTTCTCAAACCCATGCCAAGAAAGATTCTTATAATATCATTTCTTCTCAAACCCAT
GCCAAGAATAATTGTACCATATCATTTCTTGCTATTTCATCCCTTTTAAACTAAGAAACAGGCCAGGFGTGGTGGCTC
ATGCCTGTAATCCCAGCATTTTGGGAGACCGAGGCCGGTGGATCACCTGAGGTGAGGAGTTCAAGACCAGCCTGGCCAA
CATGGTGAAACCCGTCTCTCTAAATAACAAAATAGCCGGGCATGGTGGCGCATGCCTGTAGTCCCAGCTACTTGGG
AGGCTGAGGCAGGAGAGTTGTTGAACCTGGGAGGCAGAGGTGTCAGTGAGCTGAGATCGTGCCATCGCACTCCAGCCT
GGGCAACAAGAGCAAACTCTGTCTCAAAAACAAAACAAAACAAAACAACTAGGAAACATTAAAGCTTCCAAGGAATTG
AGCGTTAAGTGGGGTCTAACATTTAATATGACTGTAGAGTAACCTCTTTACTAAGTCTTTTACTAGTTTCTCCCTT
TCTCTCAAATATGTACAGTTTAAATTGGATGGGTAAAGCAAATGGGAGAGTATTGCTACTTTTATGTCATATTTATACA
AATGAATTATATAATATTAATTGTTTCATAATATTCCTTGTAATTTATAGCACTGTGAGCAGTATAAAATAATTTGATAAG
CGCTGGGCCTGCCAGCCTTTGTAATGTCTTGTCAAGAGTAGATTGAGAACTGTGACATGATGTTAGGAAATGGAGATT
TACAAGCTTACTGAAGAATATAACTGAGGCATTAGGAGTGCTTTTCTGATCGGATTAATGTTTCAATTTTATTTCAATT
TTATCAAGTGAGTGTTAATGAGAAATTTAGTTGGCTCCAGTAAATCATTATTTTTTCTATGAAACATATGAAACCT
AAAATAATAGTCTAATTGTTTCATTTTTATGGCTTCGAAATCTAGACAAAAAATTTCTAGACAATGTAAATATTT
AACCAGTAAATATTTTGATGCATTAAATCGCAAAATATCTTTTATAATTGCTGCATCTCTCTCCAAATAACTAGAACC
CAATTCCCATTTTCACTTTTCTCACATAAATCATGAAACCATTTCTTATAGTCTGTAAACATTTCTACATAAGTGGCTAG
AACATATACTGCCTTATGTTAATTGCATGAGACCCGAACCTATTTAGTGAGTATTTTGAAAAGCAGTTAAAGAAAAA
GATGATGAAACATTAATGGCTCCCTTCTCCAAAGTACCAAGTAAAGTAAATATACGGTCATGGAGTTCTTTTAAAGG
GATGATTAGATTTTCTATTTTCTGCATATAAAGTACCCAAAGCTTTGTGGCTTAAACAAATAATTTTATTCTCTCA
TGGTTTCTGTGAGTCAAGAAATGAACAAGGTAGGGTAGAGATAGCTGGTCTCTTGTATGTAATGTCTAAGGCCTTAG
CTGGAAGACTCTAAAGGTTGAGGGCTGAAATCATCTGAAAAGTTGTTTCATGTCTGGTGGTTGATGCTGGCTGTGGGCTA
GAGACTTCAGTTCATCTCCATGAGTTCTCTCTTGGGGTTAGTTTGAACCTCTCATAGCATAATAGCTGATATCCAA
GGGCAAGCATCCCCAGAGAGAGTAAGAACCTGTTAGAATCTGTGTCCTTTTTATGCTTTGGCTTGGAAACCACAGAGCA

149/375

TCACCTTCAACCACACTTCATGGGTTGGATCAACAACAAGTATCCTTCAATATTCAAAGGAAAAGAACGTAAATCCAAC
CATAGATTCTACCAGTCACAACGTAAAGTAACATAAGAAGATCTGTATATTAATCTTTGGAAAATATAATATGCTATGG
GAGGAGTGGACACAGGTTTAGCTAATGCCAGGTTAGGGTTTTATTAAAGTGGGACATGAAAGCTTAGAGCTTGAAGTGAC
GAGAAAGAGGGAGCAGGGTTGGATGGGGTGAGAATTTTACGGACTGTGGATATAAAGGGGCTGCATTAGTCAGTTTTCA
CACTGCTATAAAGACATACCTGAGACTGGGTAAATTTATAAAGAAAAGAGGGTTAATTGACACAGTTCCACAGACCTTGG
GAGGCCTCAGGAACTTACAATCATGGAGGAAGGGGAAGAGGCATGTCTTACATGGTGGCAGGTGAGAGGAAAAAGAGT
GAAGAGTGAAGGGGGAAGAGCCCTTAGAAAACTATCAGATCTCTTTAGAATTCACTCACTATCACAAGAGCCGGATGG
GGGAAACTGCCCCCATGATCCAGTTACTTCTACCTGGTCTTTCCCTTGACATGAAGGGGTTATGGGGATTATAATTTAA
GATGAGATTTGGGTAGGGGCACAAAGCCTAATCATATCAGGGACAGAGAAAGGAGAAGTGAGGAGGCTGACATTATGAG
ATGGATTTTGAGGGAATAACAGAGATGTTTAAACGGGGATATTTATGCAGCTTTGCTGTGTGGAATGTGAGGTAAATTTG
TTTCTCTATATTTTATAATCTTTAGAGGAAACATCCCCTGGGTTGTAGAGTTGGATCTATTTTGGACAAAATACAT
TAAGTTGCTGAATATGGCTTCTATGTAGAGGGAGGGAAAAAGTAGAGGCCTACTAAATCTAGGTTACATCTGTTACATC
TGCTTTCAGAAAACTTAGTAATAAATGTGGCTGTCTGTTAAAGCTTTGGTGGTTCCTAAATGTCTATTGCAAAGACTGA
AGCCAGTCCATGGTAAATTTTCATTGGCAAGCTCTGAAATCAGAAATTAGACATCATGAATCTTTCACAAAGCTAAAT
TTGTTCAATTAATGAAATGATCTTTATTGTGAGTTTATATCTTCCAACTTTTAGTTTAAATGATCTTTTAA
GAGGAATGATGGTGACGTAGATAGTACTTGTGTTTGGATTTTAACTGTCTCATATTTGGAAAAAGTAAAGGTTACT
GACCACCATACCTTTAGTTTCTAAAACACTGGAGTGCAATCTCTAAATTGCAATGTGTTTGGGGAAAAAATTCATCC
TTTGCAATTAGGTATTTTATTGACATTAGATATAAGAGAATAGTATAAATTTACCTAAATACACAGAAAAATAATCTTT
ACTCTTTATAATCCCAAAGAAATATTCCTTAGTTCTTTTTCTTCTATTTACTATCAATATCTATCACAAGGCTGATA
TTACATGAAAATATTAATATAAATGTTACAACATTATCTTTCTTACGCAGGTTTGTGTGAGGATTAAATAAATTAATA
TTTATGAAGAACTTTGAATCATGCCTAGCATGTAGTATGGACTCAAATATTGCTAATAATATTGACAATTTTTTTTGAA
ATTGCTCTTCTTCTGTAACTCAATTTATGCCATTGGCATAAATGTTTTGAGCTAGACAAGATATTGCTCTATTTCAGA
GTTGCCCTGGAATAACTTGTTCCTTTAATCATAACTGGTACTTTTTTAACCTATTTAAGCTTTAAATTTATCCAGAAATA
AAACGAGGAAAAAAGAAGAAATTAACACAGTAATAAAACCAATTTCTCAGAAAGCCAAAAGATAACAACAAAATAAAC
TTTAACTACAAAAGTCTTTTTAGAGAAGAAATATTCTTATCCACCTCATAGCCTAGACTCAGTCAAGGGAAAGGGCAGC
CAAGAATATCTTAAGTGATATCCTGGGCTTTGTTTTCTTGATTCAAGTAGTGTTACATTATTATAATTATATATTCTT
TTATCTGTATATCTGTCTATTTCATCCATTTATTTCATTTGACAAAAATTGAGTATCTGTGTTTGGAGACACAAAAGATAA
ATAAGATATCCACATCCCTCCAGGAAAATGTAGCATCTATTTTATAATACTTATGAATATTACTGAAGATCTAATTATA
AAATAAATTAATCATTTATCAATATAAATCTATTAATATGAGTTTATATGACCACCTATAATGATAACAAGTATGA
GTTCCCTCTTTTACTTTTATCTGGCCTTCCCTCAAAGATAGAGCTAACTACCTAGCTACTGGGCTGAAAATACTGAGT
TATTAGCCTTTGTGCATAGTAAGCTGGTGGTCTTAGATCAGAGGTATATGGCTTTTTTCCAAAGACTGTGAGATACG
CAGAACAAAATCAGAAAATATAATCTTTTAAATGAATCATGAAGTACCAAAAATGTAAGATCTCTTAATAAAAAATA
ACATTTAGGATAGATACCATCAGACCAGTTCTGTACTGTCCCTATCTACTATTTTGAAAATCTTCTCTTAAAGAACTTTAA
CTCTGATGTTTGAAGTGGCTCATAAATGAAAATAGGTTTAAATGCTTATTAATCATATGTAATTAACACATAAATCTT
TTGTGTTTATAATCATAAAGTGGATTGTCTTTGTTTTCATGTTTTCTTCTTAAATAATATAAAGCAAATAAATGAAACAAA
AATGGAGGTGTCTCTGTAGGTCTACAGTTATATAAGGAAAACCGGAAAGATAACATAAAAAATCTCCCTAAATCAGGT
CTATACAGAAACAGATTGCTGGATTAGAGAGTAGATAATGCATGTAATCTCAAATATAAATATAGCAGGTGACTTT
TTATGGGGAAGTTTTTCTTAATGTTGATAGTAACATATCTGTACTTGACATTAATTAATCCATATCGTAAAGATTGA
ACCAGAGAATCAGGCCCACTTGGTCATAGAGGCAGTCAAGGAATGGGCTCTCCACTACAATTTGATGTGAATTGTCTAC
TTATCATGTCTCATAGTTAAACCAGATAGTTTGGTAGATTCTTTATCACGTGTGTTTCTAATACAACCAGGAAAACCTA
TCGTATATTCTTTTTTTTTTTTTTTTTTTTGTGAGACGGAGTCTTGCTTTGTGCGCCAGGCTGGAGTGCGGTGGCAGC
ATCTCGGCTTACTGCAAGCTCCGCCTCCAGGTTACGCCATTCTCCTGTCTCAACCTCCTGAGTAGCTGGGAATACAG
GCTTCCGCCACCATGCCCGGCTAATTATTTTGTATTTTGTAGTAGCGACGGGGTTTTACCGTGATAGCCAGGATGGTCT
CGATTTCTGACCTCGTGATCCACCCGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCGCGCCAGCC
TATCATATATTCTTACATTCTCTCTCACACAAATGTGCATGCGCACACACACATGCACACATATACATCATTCTGAC
ACTGCCTTAACTTTCAGAATACAAGGTTGAGTCTCTGCCACATACTAGCAGTATAATCCTGGATGAGTTACTTAACT
TACTTTGCTTCAGTTTGGAGATGAAATGAGAGAATATGTGTAAGACATCTGGCACACATAGTGAGCATTCAATAAATGT
TAACTATAAGTAGGTGACCAGTTGGGGCCCAAGGAGATTGTAACCTTGCTTAAGGTCATTAAAGGTAGTTCTGTGGCTAAGT
CAGAATTAGAATCTACATAATGATTCTCAATTCACCTCCTTTATACTAAGTTATCTCACTAATTGGCAGCTCTTCTCT
GTGTTAACTTTCTGTACATGAAGGGTTTGCCTTCCCAAGTAAGTTGTAAGCATCTCAAAGGTTAAAGAGCATTTGTGAGT
ATATCTTCATCAACCATAGGTTCTAATAGAGACTTCTTGCTATTTGTAGGGGTTGAGCATTATTGTTAATTATGATGAGC
TTTCAACTTCACAATAGTTTAACTGAAATGTGTTTATTCATCCCAATTTTCTCATTCTGTCTTCAGTAGTTCTGTATAT
AAGAACCTCAGAACCCATTATCATTCTCAGCATAAAATTAGAATTGCACTCTGCACAACCTACCATCTCTCCCTCTGTAAG
TCCTCAGAGAAAATCATACAATTTTCTACTATATTTCTGCAGTATGAAGAAAATAATTTAATATACCTATGCTTTGGTT
TCTCCATATACAGAACTTATATATGGCATTACTCAATCACCAGAAATTCATTATAATTTAGCTTATTGTTATGTAAA
TTCAGGCATAACCCAGGCCACAATATGATCCCAAGAATATAACAAGTATCCATAGGGAAAACCTGGTAGAATAACTCAA
GAGTGGGAATTATTTTAGCTTTGGATGACTTTTATATAAAGGAGCTCCACTACAATACATTAGTGGCACTATTAAC
ACACTCGCTAGTAAGCTAATATTTGAGGTCCATTTTTTACATCTCTTTGAGAGTATATCAGTATATCAAGCATTACAAA
TTACTACCTTGATTGCCTTTGGAGCTACTCTTTTTTGGAGACAGAGTCTTGCTCTGTCAACCCAGGCTGGAGTGCAAGTGG
CACCATCTCAGCTCACTGCAACCTCCACCTCTGGGTTCAAGTGATTCTCTGCTCAGCCTCCTGAGTAGCTGGGATT

150/375

ATAGGCGTGCACCACCATGCTCAGCTAATTTTTGTATTTTTAGTAGAGACAGGGTGTCACTATGTTGGTCAGGCTGTTTC
TTGAACCTTCTGACCTTGTGATCCACCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCATGGGCCACCGTGCCTGGC
CCTTAAGAGCCAACTTAGCATATCCTTTGTAAATCAGTTGCCTAAACAAGCTTCCTCTTAAATATGCCTTTGAAAAATAT
AAATTCCTCTCTATCAGTATCTACATTTCACTTTGAAGATCTTATCGGCTTTTCAACAGCAGGTGTGCATATCCTACAAG
TTTCAGTTTTCTCTTGATGCTCAGGATGAACATAACATCTAGACAAGGGAGCATCTGGGAAGTCTGACTAACTGGACTA
CTTGGACTGGTTTGTCTCACAAAATGTAAGACTTACAATCTGTAGGCTGTTACCTAGCTCCTGAGAGCTACCTCCCCC
GGGCCGCCACACTAGATTTTTAGTCTGTAGCTGCATACCAGGAATCTCCTGTTTTCCGTGAATCAGGAAGGATATGG
CAAGTTAAGAGAGAAGGAAAGAACCTGCTGAGCCTTGCCCTTCAAGGGATATCAGGAAGTTACTCAAAGACGGCAAAG
TGCTCTCTACACAAAAGTGCTGGAAGAACTGCAGTTATATTCCTTTTAGGAAAGGAACTTTAAGATGATTTGGAAATA
GCCAAATGTAATCACATAACAACCAATTTTTGAAGTTTGTCTGGCATGCAACACTCCTTTAGGAATCTTGGTTTTCCAGCT
TGGTCTCATTGGCAACAAATAGAAATTTCCTAAGCCTTATTAGGAGCCTGACATTTTGTGTTGAGAATCAAACTTTTCTG
TTTGAAAACCTAGAGCCAACTCAGTTATATAAAACAGGGATGTAAGAGAAAGAGCAACAAAGGAAAGCTATTATGTTA
TATGTGTGCAGACATAATAGTTTGAAGAGGGAGACTTCTCGATGGACCAGAATAAATACTAGAATGTAATACACAACCT
CGGTTATACAAGGTAAAAATGAGTTACTGGCCCTTCAGGATGGGTATCATGATAGCTCATTAAATTTAAATAACTCCTAA
TATGCGTGTAGCAGTTTATCAGTTAGAGAGTGTCTTACATGGGTGCTTTTTCACAATAGATAACTTAGGGCAAGTGAAG
GCCTGGGTCTGAAAACATATTCTGCAAAATAAGCCCTCACTGTTTAAACCTGGCAAATGCTAAGGACTCCACAGCTAG
AGCAAATGGCTTCTATAGTTGAATAATCTTTCAATAAAGTTAGAAAAATGGGTGTCTTCTTCAATGCATAGCATGTTG
GGAACCCAGGATACTTTAGAAAGTCTCTTGGTCCAGCACTCCGACTTGTGAAAGACAAATATTGTCTACATAATGCTTTG
GCTGATCTCTTATTTCTTGTCAACCTAAGGTACAGTGGGTATTAAACTCTTTTAGCTTCTGAAAGACAACTAATTTCC
GACCTCCCTGTAATAATTGCTGAACATGGGAAGTTTTGGGGTCTGAGTTTTAATTTCCAAGTAATTCATTATGTCTGTCA
TTGTCTGTGGTAGGTTGCTTGGCCACCCTTTGCCAGTATCATTATCTGTGACTTGAGGCAAATGGTAAGGACAGCTTG
TCTGAGTCTCAGCACTTGGGTGGCAGATGTGACAGAGATAGATAAATGGCCAGAGTGAGTATTTTAAACCAGAATACT
GCCCCCAAGCCAGTATGGGACCATCTACAGTATGGAAGGCAGCTCAGACATAGGTGAGTTTGTTCAGGAGACCACACA
TTATGATCTGTTGAGCTGTTTCATCATTTTCACTTGAAAATGAGGGGTGGCTGTTTTTAGGCTGTGAGCCTCAGATTTGA
ATTCTATAGTGATTAGGTGGTGAAATGGCTGCTCTCTGCAGACTGCTCAGGGGCTGTTAGAGCTACACAATTGCCCTAA
AATCAACAGGAGCAAATAGCCTCACCAAACAGCCTTGAGTCATTCTTTAAGTGAGGGTGATTAGGAGGTCAGCTAT
TTTTAAGAAAGAAATTCATAATCAGTCTGTCCAGAGACTCAAAATTATTTATCATGGCATTTTCCAATGTCACCTTTC
CTCACCATCACTTTGTTGGCATTAGGCTTTGAGACATGGTTCTCACCAGCAAGATGGTTATTTTTATGTCCTTATCAAGG
TCTCTAACAGGTCTATGACACGCAAATGTTAGAAAGGAGAAATAAGCAACAATTGAGTAAAGCAATAGTACAGTGGGA
AGAGAGACAGGAAGATGATGTTGCCATGTTTTAGTTTAAATATAAATTGTTAATATCTTTGTCTCAGTCACTGTATAGAA
ATAAAATATTTTTCAGATATAAAGATCCTAGATCTTCATTGAATCCTACCTCTCTTAACCTCAGCCCTTTTGGAAAAACAG
CACAAATCCAACTGTAATTTCAAGCTCTAAATAAAGGCTGGGCTGGATCCAAAGTGTTTTCAATATTTTCTGGTA
GATTTTTACTGGTTTTTTCATGAAAAGCACTTAATTCAAATGATTATTTCCATCTTTTAAATGTTTTAGTCAACAGTAAA
TGATACTCTCTTCTGATATACTCCTCTCAAAGTGGTAGAAGAGTTTGTGGCAAATTGCCATTTCAACCATTTATCTGCTG
TCCAATAATGCAGTATTGAATACACTGAAGCACGGAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA
AGAAAACTTGGCAAAGTAATAATAGTGAAATTTTATTGCTTCTCAATAGATTAATATACTTAATAATATCTTAGAAAA
TGCTGCACTTTGAAATTTTAAACATGTAACAGTGTATATCTTAAATTAATAAATAAATAAATAAATAAATAAATAAATAA
TACTTTATATAGTCTATATTCTTTGTGAGATTTGGGTTTAAACACATCAGAGTTTAAATTTCTGCGAAGACTGCAGAGTA
AAGAAGATTAAGATGGAGGGAAGGAGGAAGAGCAGGAAGAGGGAAAGTAGGTATAGAGGAAGAAGAGAAAAGGAGATAG
TAGAAAGGGGAAAGGAAGATGGCAGGGAGGAAGGAGAAATACCTCAAGTCCATGAGGGGTTAGTGCTGAAGGATACCTT
CATCATTAAGTAAAGGGTGAATTGCACTGGGTTGTTTAAAGCATGCCAGATACTGCTGGGTGCGGTGGCTCACGCT
GTAATCCCAGCACTTTGGGAGGCCAAGGTGGGCAGATCATGAGGTGAGGAGATCGAGACCATTGTGGCTAACACGGTGA
AACCTGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGTGGTGGTGGGGCGTGTAATCCCAGCTACTCGGGAGGTG
AGGCAGGAGAAATGGCGTCAACCCCGGAGGCGGAGCTTGAGTTAGCCGAGATGGCGCCACTGCACTACAGACTGGGCGA
CAGAGCGAGACTCCGTCTCAAAACAACAAACAAACAAACGAAACAAAAACAAAAAAGCATGCCAGATACAATCCTTA
AAGTATGCCAGATACAATCCTAATGCAAAATTTTATCAGATGGAAGATCAAAAGCTGGAATAAATAGAAAAAGGA
GTTTCATGAAATGTATTCAAAGAAATTTTAAAAATAGCTCAGGTACAGAATCTGTTAAAGCAACAAAGCAGACACATGAC
TCTTCTTAATCTTCCACACTTGACTCCACGGCATTAAAGTTAACACTTCTTAGTCTCCTCTGAGTTGAGACAAATTTCC
TGAAAGGAAGGTTGACATTTCCCTGGACACTTTAAGGATCTGTTTGTGCCTCATGGGTATAGGTTGTAAAGTTCTTTGC
ATAGATATGTCAGCATTTTGTGTCATTGTTTGGCTCCAAGTGACCTTCTCCTCCCTGCATTTCTCATTTGCCATTCTC
TTCCTTGCTTCCCTTCGTCTGCCATAATAGTCCCTGGGGTATAGTATAAGTGCTTCTAGGGCACTCCTCTAACTGCACGG
TTATTGTTACTGCACAATTAAGGACTTAGATTTGAAAAATGGTAGTGTGTTGGAATCTGCAATCTCATTCTTAGGG
GCAGGGAACAATTTGGAACACCTAAAAAAGGGTCAGAGTCCAGAACAGATTTCAGGAGAGAGTTGAGCTTTCAATTGGGT
TGGTCCATTTTTTCACTGCTGCCCCGACGAGCTGTCTGCTGGAACGTCAGAGATTTTCAAGGAAGGCGCGGCTAAG
CAGAGGTGAAATCTTTAGACAGATGAGTCTCAAAGAGGAAATTTATGCAGAAGCCAAATGGCTACAAATGGTATGAGGA
TTGAAACCTAAACTATAAGTGAAGGTCTCTTCCCTAAATGATACACTCAGACTTAACAATAAGCTAATAAGGTGGTCA
ATAAAGAAAATGTGGGTCTGATGGAAGAGTAGAGAGTTTGAAGGTGAGTAAGAGATATCTATGATAATTAGCTTGGGTG
TGTTTTTGGTATTGATGCCATTGTGTTGGGAGTACAGCAGAAGGACAAAGAACTCCTTTAGCAACTTGGCCTGCAGTCA
AATAGGCCAACATTGGAATCTGAGCTCCACTGCCCTTCTTACCCTGGGACTAATCACTTACCCTCTCAGTCTCCTCATCT
GTAAAAAAGGATAATAATAATAATAATTGTTACCTTTGGAAAATTACACCTTTCTCTCTGTACCTTTAACCTTT

151/375

CTCTCAACTAGATACTTTCCATGAGACTCAAAATACATTCAAGTGTCTTCTGCATTAAAAACAAACAAAAACAAAACCTT
CACCTTCAACCACCTTATTTCCCTATGTTAGGGTTTCTCTTGACGTTTGGGGCTAGATAATTCTTTACTTTGGGGCTGTT
CTGTGCGTTTTGGGATATTTAGCAGCAATCTTTACCCATGAAAATATTGTGTCCCTCGCCCCACAAGTTGTGGCAATCA
AAGTTGTCTCTAGACATTGCCAAATATCTCCTGGAAAGATGCCACCCCCCAGTTAGGAACCACTATTCTAATG
ACTGCCTCATCTCTTGTCTCCCTTGCAAAGCCACACTTGCCAGTTTGCCTATTCTCTAGCTATATTCTCACTTC
CCTATCACAGCCGATCCTATTCTAGTCTGTCTCTTGTTCCTCATTTTACCAATAAAATCATTTTGTAGTAAGAAGACAAT
AACCTGGATAGTTCTAAATGTAATGAATATTGCAATTCCTCTCTTCTGATTCTCACAATTGGAAGTGTGTCTCTCT
CCTGGCTCCTCTGACACTATTCTCTCTCGGCTTGATCTGTGAAGCCTGGGTCTCCTGGAATAGCTGCAGCCTTTCTCTC
CACTTTCTTACCATATTCTCTCACTGTGTCCAGGACACTAGCTCAGACTTTTTCAAATGCTGATTAAAGGGCTTCCATG
CTGACAGAGGGCAAACCTCACAGAGCAAGCTTTTCTTAAGCTTTTGCTTATATCACATTTGCTAGCACTCTCTTGCCCA
ATGCCCAGAGTCACATGGGAAGAGCCTACTGAAGGCAGAAATACAGAGAGAGAAGACTTTTGGCATAACATCTTGAGGG
CTTCTTTTAAACCACTCCCAGTAAACTAGTGAAAATATGATCAAAACAAATAAAAACTCCAAGCACTTAAATCCTCT
GGAAATGATCCTAAGGACAAATAGCAAATGAAGAAACATCTATTCAAGAACATTTATGAAAATTCAATAAGAAAGGCAA
GCCTGTGGTATTTAAACCAAGACTGCTCCCTCTCACCCCTTCCAAGTTCAAGGAGATGGAGCTTCCATTCCAGGCTGG
TGCAATCAAGAACACAGAGCTCTCTCCCTCCAGCTGGAAGGTTTCTTCTGGAAGGAACAGAACTTCAGTGTCTCTCA
TCTTGCCCATAGTTTACCATTGCTAAGGCTAAGCTCTGGTGAATACAGTAGAGAGGTAGGGGCTTCTCTCCCTGCCAAA
TCCCCCATCATTTGAATTGGAGGGGATACCTTAGGCCTGCATGCTAAGAATACAGAGCCCTCATCATCTGCTGGCT
CCTGAGGTGGGGTTTCCACACCAGGAGAGATAAAATATAGAAGATATTAGAGTGCTGCCACCTCCCAACTCAAGCT
CCTAGAGTGGGAGTTTTCATGCAGTCATGCAGGAAGAACCTCTCCATTTTCTCCACCTCCATCTTGAGAAACATGGCTTA
GAGATTTTGGCTGGTGGTGGCGGGGCAATAATCCATCATAAAATAAATATTCTTAATCTCTTCCCAAAGGGCATGGCT
TCATTTGCAACAAAGTATGGAAGGTTCAAGCCTTAGAGTGCGCTCAAGAACAGTGGAAGCTATGGTGAAAGGCAATTG
GGAGGAGAGTCAAGATACAGGCTAAATTGCAGACTAGTTTGCAGGAGAGAACCAGAGAAATAACACAGCTGGGAGGAGC
CCTGACTTCGAACATTTTCTTCAAAGGAGACACAATTGATTGTATTAGTGTGTTGAACAATATAAGGTGTAAAGCAC
TGTTGAAAATAACACAGCAATTGTTTCAACAATTAGTGGAGTTGAACAGCTGAATGTGGTTAAGGAAAGAGTGAAGGACA
ATCACACGAACATCACTCTCATGCCGGCTGGGCTGTCTGTGGACATACCCAAAGATGTACCTCCCTGATAGCAAACTCA
GTGACTTAACGTAGGGGAAATTAACCTACCTGACTGTGAAGGAATATACTTATTAAATAATCCAGCCCCCTCACTAAAC
AACCAGAAATAATAGCAAGCCCTGGGTGGTGGTAGGGGGAGTAAGAAGAGTTGCTACAGTATATTATCTGCAATATCC
ACTTTCCAACCAAGATCACAAAGCATGGAAAGAAACAAAAATATAACCCATACACAGGATAAAAGAACCAGATGGCA
GAAACTATGGGTGAGAGGGACCCAGATGTTGGATTAAATAGAGAGATGGAGAGGAGAATGAATGCAGCCAGTGTGCAAT
GTGTCATGTCTCTAAATGTTCAAGTCCCTCAAGTCATAGATCCACCTATTTTTTCTCAAGTTAATATCTCTACACCTA
GTTTTAATCCCTGTCTATGTATACAGGACTCACACATTTTATCTTCAACTTAGGCCTTCCCTCTGAGCTCCGGACCTGT
GTATCATTCAGCCTTTTTGAAATCTCTATCCATATGTCTCAAAGGCACTTTTGATTAAATACTACCAAAAATTAACCTC
CTCTATCTCCAGTGTCTCTTATTTTCAAGTGAATGATACCATCAAACTACTCTTCAAAATCAAACTCTGAGATAAAT
CTCTAACAGCTCCCTGTCTTATCACCCACCCCATCATATTGAAAACCAAAACCATTTAAATACCTTTTCTGTTGTCTCT
CCTCTCTCTACCTCCACCACAGTACTGTAGTGAATCTGCCATCATCTCTCATGGAATTACTGCACAAGTCTCTCTAT
CTGGTGCCCAAATTAGGAGCACCTTCTTAACCTGGTATCCAATCTAATCTCTACACTGTAGCCAGAAAAATCTTTTGAA
ATTCAAATCTAATCATGGTATGTGCTTCCCTTCTCTATGGAGACCATAGGAAAGAAACCGAAACTCCTGTGGTGTCT
TGAGTTGATGCTAGTAACCTCTAAACCTCATTTTATGCTGGATCTGTCACTTCTGAAAGCTCCATGATAAAGCACAGC
CTCCTCACCTCCAAGTGCGGGGTTCTCTAGTTGTCTCTTCCAGGTGCCACCAGAGGGACTTCTCTCATAAAAGGCCT
GTGCACCTATGCTCTTCTCTCTCTGTTATGGACTTCTTCCAGAGAGCTGGTCCCCATTCTTGATATGGGACTGTC
CACTTGTATGAGTAATAAAATCCTTCTCTGATCATAACAAAGAAATGGTGTCTAGTGTATTTATATTAGAAGCTAAAC
TTGAGAGGGAACCTCCCATGTCTACAGTGAAGGTGTGATGATACCTCTTTTACCATCTTTAAATCTTCCGTCGCTT
CCATTCCATTTTCTCTTAGGATAAAGTTCAATCCTTAGGTTGGCCTACAAGGTCTCTACAGTTAGGTACCCCGCTC
TGCTTCTCTCTCTCTCTTCTTCACTTAGTTATGCTCCCCACTGCCTGAAAACATGCAGACCTGCTGCATCCTCTACCTGAA
ATACTCTTCTCTCTCACCTTCCAGACTTTTACCTAATTTGCCCTTCTGTTGTCTTTGTAACACCGCTCAGAAATCTCTT
CCTCAGAAAGGCTTCTCTGACACCTCAGCACAGTCTCTCTCAGGAGTCCAGATGATTTTTTTCTTCAAGGCACTGACT
TTGGTTTAAATTTGTATTTATTCATGTAATTAATTTGGAGTGCAATTTATCTTCTCTCACTAGATATAATCACCATTAGCT
CAAGGCTTTTATATGTTTTGCTTGCCATTGTGTCTCAGTGCTTAGGCCATTCACTGACCCACAGTAGGTGCTCTGATA
AATATTTGTTGAGTGTAGAATAAATGAAGACCTTAGAAGCATAAATATATAATCTCAAAGCAGAAGATACTTTAGTT
AGAATAAGTTAGGTTCAACTATATTAACACTCCTTACTACACACACATAGCTACACTCATCAATTTTGGTGGCTTAC
ACCAAAAAGGCTTATTTCTGTGCACACTGCATTCTTGTGCTTTAACAGGATACTCCGCCCTACCTCATCTTTATTACA
GACCTTGGCTGACGGAGGCTACCACTTGGAAATATTGTCTATTTTCAAAGTCCAGCAGAAGAGAAGTTAAGAAGGGTTTC
ACTCTGGCAATTAAATATCCAGCTAGGAAATGACATCTTATCTTCAATATACATAATCCATTGGCCATAACTAGTCTCA
TGGTCTCTGCCCATTTGTAAAGGGGAAATAGGTAATCTCTCATGCAATTGAGGAGGAAAGAAGAAATTAGATACATGTGAC
CAGTAGAAGTCTCTTACTGACATTTTAAATGTAGAGCTGTATGTGATTAAAGTTAAATTTGAATCTGAAGGGCTGACAG
AAAAATTCAGAGGATATGATATTTAATAATTGAACGAGGCTGAAAGATGAAATTTGGACAGATTGAATGGGTAGGCCCT
TGCTAGCAGGAAAGACAAAATAAACAATAATCAAGAAGTATGTATGAACGTGTGCCAGGGCAGTGAGGAGTGATCAGCC
TCCTTGAAGTGGAGGATGTGTGTCAAGGAACCAGAGGAGATGATTAGAGTGGCAGACCTGATTATTAGCATATCCATGC
TTCTGTCTGAAGCTTTTTTGGCCTATAATGTAGAAATATCCTTGGAGTAAGCAGTTTCAAGCATATGGTTTATAGCATATA
GGTCATCTTGGCTGGATTGCATATTCTTCATTTTTTAAATTCAGGCTGTATTGGTTGATATGCAGTCCAGAAAGAGCT

152/375

GGATCTGACTTAAGAAAAATAAAACCTGCTTTAATCCCTCTTTTCAGCCCATTGTCTATCCATTAGCAGGTAAACACCAG
TGTCCCTGCAAGTGTGTGAAGTGAAGTTCCTTAATTTACCTTTAATTGGCACTTCTAGTGACTTAAGTGAAGAG
ACCTTAGCAATGATACAAAGTGAAGGATGGTATAGAATAATAGGTTTTCTGAAAACCTGAATGCAATTGAAGGGTGCT
ATTTAATAAATCTGTCCCTAGAAAGCTAATAGCACGTAGTCAATACAATTTAGCCTATTTTCTCCCATGTTACATTTGTT
AGTTGTACTGGTTTTGGAAAAGGAAAAGTCAATGCTGTTACAGTTCCACTAATAGAAAACAGATAATTTGGGAGGAAATT
AGATTGGAATAAAAGCACGTTGTTAAACAAGAAATCACAATAAAGTATTGAGTAGAGAGAAACCGTTAATGGAGACAGC
TATGTCATACCTAATATGCCCTCTTTTCATGATCCTTAGAGGAAGCATAAGATCGCAGCTAAGTATGGTCTCTTGAGC
CAGCCTGCCATGATTCAAATTGAACTCCATCATTCACCCTGTGTGACCTTGAGAAAGTTATGTAATCATTCTTGAT
AGTGATTCTTACTGCTATGGACAGATTTGTGTTCCCCCAAATCAAATGTTGAGGCAACTGTGTGAGGAGAGAGGGCC
TTTAGGAGGTAAAGTTAAATGAAGTCATAAATGTAGGGTCTTAATTCATAGGATTAGTGGCCTTATAAGAAGGGGAAG
AGTTTTCTCTTTTCTTCTCTACTTGCCCTGCACCAGGAAAGTCCCTGTGAGGACACAGTGAGAAGGTAGCTATCTGC
AAACTGGAAAAGAGTCTTCACCAGAACCCTGACCATGCTGACACACAGATCTCAGACTTGCCAGCCTCTAGAAGTGTGAGA
AAATAAATGTTGTTTAACTACCCATTCTATGGTATTTTGTGTTATGACAACCTAAGCTGACTAATACTACCTACCTATAAAG
CAGGGATAATAACAGTGCCTATATGATAGTGTGTTTACAAGGATTTAATATATATGTTAGTTTATATTATTTTATGTCCTAT
ATATGTTAGCGTATATATTTTATGTCCTATCTCTAATTCCTCATTGAGGATACTTAAGAATTCCTACTTTCCATGTTT
GACAGACCTGGTTTTGGATTTTCAGTTCCACCTCTTTGTAACTCTATTACCTTGAGCCAGTGACTAATGTATCTAAGCCTC
CATTTTCTCTATCTGTAAATGGGGATGATAACTAGTGTCTGCTTGTCTCTTCAGGTTGTTGTGAGGATTAAAGGAGATATG
CATGACAATTCATCTGCCAGGTAGTAAGCATTCCAAATATGCTATTTACTGCCATCATTAGAGGTTTGTGAGCTTCCT
CTTTTGCAATTAAGTAAGAGACTATTCTCTCCAGAAAACCTTGAACCTACATGATGGAGGAACAAATAATAGCAGTTTCTC
CTCAACCTTGGAACCTTAAAAATGTTTTTCTAAGCCATTCTTATCTTTATTTTGTGATTAAAGATACATGCAATTGTG
CATTTTGCTTTTATTTAATATATGCCATGAGTGTCTTCTCCCTATCATGATGTCAATGTTACATTACAGATTCTAAGG
AGCAGGGGCCATATCCCTTAAACATGATTTATTTAAATAACAATATAGGATTGGATGTGACTACTGCTTTTGCAATGA
AACTGAAAGATGGGAGAGTGAGATTTTCTCACAGCTATGGAGTGGCAGACCTGAGCACTAAAATCCAGTCTCAGAACC
CAGTTATTATCTCAATGTGAAGGCAGGAATCTATAGACAGATTATTGAACATCTCATGTATCATATCATGTATATCA
TTAAGCTTATATGTATGACAAAAATAGTATTTTGTGTCAGCAGTGCTTCTCAAACATTAATAAATGAATCACCTGAGGATC
ACATTAAAATTCAGATGCTGATCAGGGAGTCTAGAATGGGACTGAAGTGTGCTGCTTTCTTTTCTTTTTTTTAGACTTT
AAGTTTTAGGGTACATGTGCACAACATGCAGGTTAGTTACATATGTATACACGTGCCACGTTGGTGTGCTGCACCCATT
AACTCGTCATTTAACATTAGGTATATCTCCTAATGCTATCCCTCCCCCTTCCCCCTACCCCAACAGGCCCCGGTGTG
TAATGTTCCCTTCCCGTGTCCATGTGTTCTCATTGTTCAATTCACCTATGAGTGAGAACATGCCGTGTTTGGTTTTT
TTGTCTTGGCAGATGTTTGTGAGAAATGATGGTTTACACCGTTGGTGGGACTGTAAACTAGTTCAACCATCATGGAAGT
CAGTGTGGCAATCTCAGGGATCTAGAAGTGAAGTACCATTTGACCCAGCCATTCTGTTACTGGGTATATACCCAAA
GGATTATAAAACATCTGCTGCTATAAAGACACATGCACAGTATGTTTATGTTGGCCTATTCAACAATGACAAGAGCTTGG
AACCAACCCAAATGTCCCAATGATAGACTGGATTAAGAAAATGTGGCAGATATACACCATGGAATACATATGCAGCCA
TAAAAAATGATGAGTTTCATGTCTTTGTAGGGACATGGATGAAGTGTGCTGCTTTCTAACAAGCTCCTAAACGATGCTAA
ATCTGCTGGTCTCAGACTACTCTTTAAGTAACAAGGATATAGTTGGTTTGTAGCAATAGTGACTTAAAGATTTTTTGCT
ATTTTTGTTTTTATCTACCCATTTTTGTATTCACTAAAATGTGTTCTGGATGCAAACTTCTTTAATACAAAGGGAAAAT
AAATTAAAAGCCAACTTTGCAAGAATTGAATTACACACATTTAAACTTAAAATGCTTCGGTTCATTTCTCTGTATGTT
GTGTATTCCTAAATCATTCACAATGTCTTTATTTTTTACCCTTTTTTATCAAATGAGGAAGTAGTACTCCTCTGACTT
TTTTAGTTTTTATCTTCATAACACATTAAATCACCTCAACCTTCTTAAAAGCTCTCCTTGTGTTTTCTGACTTTTAACT
TGTCTTGAGTCTCCATTTCTCAACCCCTAAGTCATGCCCAATCTGTTCTCTGACATTTTCTCATCTCTCTTACTTTT
TTCTCCTTGGAACTCCCATCCACTGCCACATATCAAACATTAATTCAGCTCTCTATACACTTCTGCATCAGTGTCT
TTCATTCAAAGTCTTTTCTAAGTTTATTTCTCTATGCCCAATGGATTGGATCTTATGACCTCACAGCCCTTTAAAC
TCAACATGTCAAAAACCAAGATTCATATACTTCTTACTGTTAGGCCCAAGCCATCTGCCCAACCAACCAGGTTATAT
TGTTCCCTTTATCAAAATTTTTCAGTGATTATATTTACGGTGGAAATAAATTTTAACTCTTTATTTCTGACATTGAAAAT
GTCGTCTCTCAACTTCAATATTTTTTGTACCTATATCTTCCATTGCTTTTAAATATGTGGTTGACTTAAAGTTTGCCT
GAATCCTGTTTCCAGAATGTGCTGGAAGTCCCAACCTCCATGCCATTTCACTCTGAATCTAAAGATCTCGTACCAAT
CTTTGCTTATTCAAATGTTGCATATCTTTTAAAGGCCTACACGAAATGCTACAACCTTTTGTGGTATATTTCTCTAATCCCT
TACCTGAAAGTGAATGGTCCCTCTCTGCACTGCTATAATGCATATTTTGTGCTATTTAGAAGACAGCCCATGCTGCAC
TATATATTATAGATCTATGCAAAATATCTGCCATATCTGAAACTTCAAGGCTCCATCTCTTCTCCATTTATCTCTCCAAA
CACCATTACAGCAGGTTGTTGTGTCAGTAATAAAATTTTATGAAAGTTTGGGGATTATGAGGGCAATTATAGCAGAA
GCAGGAATCAACTGGAATTAGAGTGATAGAACCAGCCCTTAGACAGCTATCAGACACTCCCTGACCAAGTCTGTCCA
TGGACACAGAATCCTCACCTCCAGATACTTCTCTGCACTCTCTTACCAGTATCATAACCTCACAAAAATGACAA
AACTCAATGCCTTTTACTTTCGTTATGTCAGTAATTTCCCTCTTTTGTGTTACTGTTTAAACTTTCCAGCGCTTTGAGAGGC
CAAGGTGGGCGGATCACCTGAAGTCAAGAGTTTGGAGACCAGCCTGGCCAACATGGTAAAAACCTGTCTCTACTAAAAAT
ACAAAAATTAGCCAGGTATGGTGGCCAGTGCTGGAGGCTGGGGCAGGAGAATCGTTTGGAGCTGGGAGGCGGAAGTTG
CAGTGAGCTGAGATGGTACCCTGCACTCCAGCCTGGAGGATAGATTGAGACTCTGTCTCAAAAAAATAAAAAAGAAA
AGAAAACCTCACCTTCTATAATCAAATAGGTTTTTAAAGTGTTCCTAAGCTTGATAGCACTTCAGTCTCTCAGAGGA
ATTCTGCAGTCTGCAAGTTGCTTGGGTCAACCAGCCAAAAGTTAACTAATTTGCATAATGGCAGCCCAATAAATGCG
CAAAATTATTATCTTTTATATGAATGCTTATTAATATATATATATATATATATCTCCTTTTACATCTATCTAGAAAACG
TTTTAAGGGAAGAATCATATAGCTTCAAACATTTTTGTGTTAATTACAATATGGAAGAAAAGAGAGTTCAATTCCTTAATC

154/375

GTAGGGATATATATATGATCTAATATATAGAAATGGATATATAGAATATATATGTATATAGAATATATAGAAATTTCTA
ATATATAGAAATTTCTAATATATAGAAATGGAGCATTTTAAGGTCTGGAACCTTTGGGGCTGTCAACAGTTATAAGAAAA
TATAAGAGAGATATATACAGAGAGAGTAATAACAGGTAGTCCAGGAGTAGGACAGGAGATTAGTGGCCCAGAATCAA
TACCATATTTGTTCTATTTTCATCTTTTTTGCAAGACAAAATAGATACCCAGGGGGCTGGGGAAGGTGACCAGTAAGTTAC
TTCCATTATTTTCTTTTTCTTTTTCTTTTTTTTTGAGATGGAGTCTCACTGTGTGGCCAGGCTGGAGTGCAGAGGCACA
ATCTCGGCTCACTGCGACCTCCACCGCCTGGGTTCAAGTGATTCTCCTGTCTCAGCCCCCGACTAGCTGGGATTATAG
GCGCGCACCACCACACCTGGCTAATTTTTGTATTTTCGGTAGAGACGGTGTCTCAGGATGTTGGCCAGGCTGGTCTCAA
ACTCCTGACCTCAGGTCACTGCCCCACCTCAGCCTCCCCCTATTACTTTCTTCTTTTATCCTTTTCTACTGTTTAAAGC
TCAAAACTTGTGTTGAAACTCCCTCTCCATCAGATTCTGTGTGCCCAAAGAACTGTCTTGGAGGAGAGTTTCAAATGTCT
TTCATTTTAATGTCTGGCCTTGGTGATTGTTTAAAGAGTCCCTTGAATGAATTTTTGGGTGAACCTCGGGGCTTAGACTG
GCTCAGGAAATCTGGCACTGAGCCCCATATTTACTTTGGCCAAACACAATACTTGCTGTGCAGCCACATTCATCTATGCA
CTGCTCACACCACGCAGCTTGAGAGCTTTGTCCCTGATTCAAATCTGCTGGGTATTATTACAGTCTGAAAATTTACTTTT
ACACCAAGCATATAAAACAAAATGAAATACAGTTTAAAGAAATCAGCTCATAACATTTACAATTAAATTCATTAATCAAGG
CAGCTTATGGAATGCCACATGTGAACGTGTAACCTTTATAAATATTCAAGTAGTGAACAACTAGACAATCACATTGGCA
GCTTTGTTTTCAGTATAAGTGATGTAGAATATTACCATCCATCAGCTTGCACTTTGTTTTTAAACTTGTGTAACCATGT
ATATCATCAAAAAGAACTTTTGGTTACATTTCTGTTTTCCATTTGTTTCCATTTACCTCTCTAGATTTTATGTGCC
TTCTGTAATAATTAGCACCTGCACTGAATTCAGAAAGCAGCACTTGAATCAAACCAAGTCAAGCTGTCTGTGAAGGAAAA
AAATACCAAGTTCCAAGATTTTCTGTTAATGGAGATGAACAGTACACTTTGTTGATGTTCTTATTACATGTGTCTTCT
TAAAGTATGAGAAATTTAGTATATGTTCTTTTCAGTATATGCAAATATATCCACATGGGTATTTTCAAACATAGCTGCAGT
GTGCTTTGTCTGGTTTACCAGTTTTTATTCTAGTACAAGAATGCAGGATGTTATTCTGCACATTCACACTATATTAATTT
AACCTCCTAGGTCTGGGAGGAGAGAGGAGGAAAAATTAAGGAGGCCCAAGCTTTGCATTTGAGAGAAAAAGTGAACCTGG
GTCTTGAAAGATGTCTTAAGAAACAAAAGAGAGAAAGAAAATAGAGGAAATGTTAGAAGTTGAGGTAAAAGTGTGTCT
GGAGTAAAGAAGAGCATGGAGAGAATACTATTAGTCAAGAGAACTGCAGCTCAAACACTCAAATGCAGAAGCATCATA
AACAAGCTAAATTCACCTCTTCTTTTAGTTCATGTGTTTTGGTCTATGTAAGCTGAAGACAAACTCTCTTTTCCATG
CTCCCATACCTCATAGAATGTGTTTGGAAAGTATTCTCTCCTCTTCTATTTTTTCAGAATAAATGGGAAAATTGGTATTA
CTTCTTTAAATGTTTGGTAAATGCAGCAGTGAGGCCATCAGATCCTGGGCTTTTCTTTGCTGGGAGACTGTTTATTAT
TACTTTGATCTCATTACTTACTATTGGTCTATTTGGATTTTGGACTTCATGGTTCAATCTTGGTAGGTTGTATGTGTCT
AGGAATTTATTCTATTTCTTCTAGCTTTTCCAATTTACTGCCATGTAGTTGCTTATAGTAGCCTCTAATGATACTTCTAA
TTTCAGCAGTATCAGTTGTAATGTACCTTCTTTCATCTCTGATTTTATTTATTTGTGTCTTCTTATTAAGATGCTATGT
TAGAAAAATCCTGTGAGAGTCTGGCTAAAGGTTTGTCAATTTTGTTTATCTTTTCAAAAAATCAACTTTTTATTTCAT
GATCCTTTGTATTGTTTTCTTCATTTCAATTTCAATTTACTTCTGCAGTATCTTGATCATTCCTTTTCTTCTGCTCGTT
TTTTGGTTTGGTTTGATCTTGCTTTTCTAGTTCTTTTCAGGTGCATCATTAGGGTTTTTGTTTTTTGAAGTTTTTCTTCTT
TTTTTGATATAGGGTATAAACTGCCCTCTTATTACTGCTTGCAACTGTACCCGTTAGGTTTTTGGTATGTTTTCTGTTTCC
ATAACCATTTGTTTCAAGAAATGTTTTCAATTTCTTTAAATTTCCCTCACTGACTCACTGCTCATTGAGGAGATATGTTT
AATTTCTATTGTGTTTGTGTTTAGTTTCCAAAATTCCTTATTGATTTCTAGTTTTGTTCTATTGTGGTGCAGAGAAGATAC
TTTTCTATTATTTCAATTTTTTTTTTAATGTTTTTAAGACTTTTATTGTTTTGTTGTTTTGTTCTATTGTGGTGCAGAGAAGATAC
ATGTGCTGAGGAAAAAATATGTAATCTGCAGCCATTGATGAAATCTTCTGTAAATATCTATTAGTTCCATTTGGTCTA
TCATGCTGATCAAGTCCGATGTTTCTTTGTTGAACTCCTGTCTAAATGATGTGTCCAATGCTGAAAGTGGAGTGTGAA
CTCTCCAGCTATTATTGTATTGGGGTCTACCTCTCTCTCTAGCTCTAATAATATTGCTTTATATATGTGGATGCTCTA
GTGTTGAGTGCATATATATTTACAATTTCTATATCTTCTGCTGAATTGACCTTTTATCCTTATATAGTGACCATGTA
GTCTCTTTTTATAGTTTTTGTCTGAAATTTATTTTGTCTGATATAACTGTAACATTTCTGTTCTTTTTTGGTTTTCCA
TTTACGTGGAATATATTTATCTATCCCTTTATTTTTCAGTACATGTGTGTCTTTATCAGCGAAGTGCATTTCTTGTAGGC
AACAGATTGTTGGGTCCTGTTGTTTTATCCATTCAACTACTCTGTGTATTTACTGGGGAGTTTAGTCCATTGATATTCA
ATATTAGCATTGGTAAGAAAGAACTTACTCTGCCATTTTGTGTTTTCTGGTTGCTTTGTTTTCTTCTTTCTTCTTTCC
TTCTTTCTGTCTTCATTTTAGTAAAGGTGATTTTCTCTGCTAGTATGTTTTTAAATTTCTTGAAATTTTATTTTTTGTGT
ATCAGTTGTATGTTTTTGTATTGAGGTTACTACAAGGTTTAGAAATATCATATCATAACTGATTATTTTAAAGCTGACG
ACAAATTAAGAACTGATTGCATAAAACAAACAGACAAAGGAAAGAGAAAAGTAATAATTTTACACTTTTACCTTTTGTCTCCT
ACTTTCTACTTTTTTAACTTTTCATTTGTTTTCTTTTTTTTTTGGAGATGCAGTCTCGCTCTGTTGGCCAGGCTGGAGTGCAGT
GGCGTGATCTTGGCTCACTGCAAGCTCTGCCCTCCTGGGTTACAGCCATTCTCCTGCCCTCAGCCTCCTGAGTAGCTGGGA
CTACAGGCGCCCAACCACACCCAGCTAATTTTTTGTATTTTTTAGTAGAGACGGGGTTTACCATGTTAGCCAGGATG
GTCTCAATCTCCTGACCTCGTGATCTGCCCCGTTTCAGCCTCCCAAAGTGTGGGATTAGAGACATGAGCCACTATGCCT
GGCTGTAGTTATTATTTTTGATTGGTTTTGTCTTTTAGTCTTTCTACTCAAGATATTAGTAGTTTTAAACATCGCAATTAT
AATGTTATACATATCCTGCGTTTTCTCTGCATTTTACTATCATCAGTGAGTTTTGTATTTTTTAAATGATTCTTTATTGCTC
ATTAATGTCCTTTCTTAAAGAAATCCCTTTAGCAATTTCTTATAGGACAGGTCTGTTGTTGATGACATATCAACTTTTGC
TTGTCTCAGAAAGTCTTATATCTCCATGCATGAAGGATATTTTTGCTGGATATACTATTCTAGAATAAGAGGTGAGAT
CTTTTTTTTTTTTTTTTTTCCACACTTTGTGTATGTCATACCCTCTCTGCTGTCAGACATTTTGGAGCGCCACTATATAT
TATTTGTTTATTTTCTCCTGTTGCTTTTAGAGTCTTTCTTTTATCTTTGACCTTTGGGAGTTTGATTATTAAATGCCCTT
GAGGTAGTCTTCTTTGGGTTAAATCTGCTTGGTGTCTATAACCTTCTTGTACTTGAATATTGATATAATTCCTTAGCT
TTGGGAAGTCTCTGTTATTATCCCTTTGAATACACTTTTTTATCCCTATGTCTCTCTCCACCTTCTCTTTAGGGCCAAT
AACTCTTAGATTGCCCTTCAGAGGCTATTTTCTAGATCTTGAGCTTGTGTTTCATTTTTGTTGTTTGTGTTTTCTTTT

155/375

TTTGTCTCTTCTGACTGTGTACTTTCAAATAACCTGTCTTTAAGCTCACTAATTCTGTTTTCTCCTTGATAATTCTGC
CATTAAAGAGACTCTGATGCATGTAAATTACACTTTTCAACTACAGAATTTCTGCCTGATTCTTTTTATTCAATCTATT
TGTTAAATTTATCTGATAGCATTCTGACTTCTTTCTCTGTATTATCTTGAGTTTCTACTGAGTTTTCTCAAAACAGCTAT
TTTGAATTTTCTGTTTGAGAGGACACATCTCTGTCTTTCCAGGATTGGTCACTGGAGCCTTATTTAATTTGTTTGGTGA
GATCACGTTTTCCTTGGTGGTCTTGATGCTTGTGCGTGTTCATCAGTGTCTGGGCGTTGAAGAGTTAAGTATTTAGTGT
AGTCTTTGCAGCCTGGGCTTGTGTGTACCTGCCCTTTCTGGGATGGTTTTCCAGGTTTTCAAAGAGACTTGGATATTGT
GATCTAAGTTTTTGTTCAGTGCAGCTATGTCTGCATTAGGGGGCACCACAAGACCAGTAATGCCATGGCTCTTGCTGAC
CCATGGAGGTGTCCCCGCTTGGTGTCTTGAATAAGATCCAGAAGAATTCTCTGGATTACTAGGCAGAGATTCTTGTCC
TCTTCTTTTACTTTCTACCAAACAAATGGGGTCTGTCTCTCTCTCTCTGTCTTGAGCTACCTGGAGCTTGGGGAGGGGT
GACACTAGCACCTTGTGGCCACCACCCTGGGATGGCGCTGGGTGAGACCTGAAGCCAACACAGCATTGGATCTCTCT
CAAGGCTGCAATGACCAGTACCTGGCTACTGCATATGTTTGCTCAAGGTCTTAAGGCTCTACAATCAGCAGGTAGCAT
AGCCAACAAGGCTTGTATCTGTCCCTTCAGGACATCAAGTTCCTTTGCCCCTAGGAGAATCCAGAGATGCCATATGGG
AGCCAGGACCTGAAGTGAGAAATCTTAAGAAGCTACCTGGTGTCTATTTTACGTGACTGACCTGGCACCAGCTATA
AGACAAAGACCTCCCCGTTCTTCCCTCCCTTTTCTAAAAGCAGAGGAGACTTCCCTGAGGCTACCACCACCTAGACC
TATGGCAAGTGCTGCCCTGGCTACTGCCAGTGTCTTACTCAAGATCCAGTAGCTCTTCAGTCAGCTTGTGGTAAGTGAAAC
CAGGCTGAGATTCTCCCTTCAGAGCAGTGGGCTACCCTTTTGCTGAGGGCAGGTTCAATACTGTCTGGAGCTAAAGACA
GGCTGGAATGGGAGATCCCAAGGGCTGCTTGGTACTCTACCCTACTGCTGGCTGAGCTGGAGCTTAAGCTAAAGACA
AAGTCTCTTTACCTTCTTTCTCCTTTTCTCAAGCAGAAGCAGTCTTTTCCATAACTACTACAGCTGGGAATGTCT
GGGTACACCTGAAGCCAGCATTCTCAGTCTCACCCAGGCCACAGTGTGAGTACCACCTGGCTATTGCTGCTGATTAT
TCAGGGGCCAAGGGCTTTTAGTCAGCAGATGATGAATGCTGCCAGGACTGCTTCTTCCCTTCAAGGCAGCAGGTTCC
CTTTTGGTCCAGGGTATTTCTAAAAATGTTCATCCAGGAGGTAAAGGCTGTAATGGTGGGCTCATGACTCTGCCTTTTGC
CCTATCCTACCATTGGATAAGCTGGTATCCAAATTGCAAGACAAAGGCTCTACTCTTCCCTCTCCTCTCCTTAGGTGGA
GGGAAGGAGTCTCACCTGCAGCTGCAAGCTGCTCTGCCTAGGGTTGGGGGTGGGGTGGCACAAGCACTCTTTGGCTGC
CCCTGCTAGTGTCTCACTAGGTACATGTCCCCATAAACTAATTCTAAACCCATCCAGCATCAGTACTTGCCCG
GAATTTAGTCTTTGTGGCTTAGACTGTGTTCAAGTTTATTTAGTACCCAGAACACTTTAACTTATGGCAGTGAGGC
TTGCTGGATTTAGATTCTGACTGCTGGAATGGGCAATTTCACTCTGGCTAGGGCTGGTCTATATTCTCCCTCCACTGG
CGCTAGCTGAGTTCTGCCCAGTGTGTCTTCCACTGTGACAGGGCAGCACTGAGTTCCAAAGCAAAGTCCCCAGTCCG
TGCCTCTCCCTYCCCCGAGCACAAGATTCACTCTCTGTGCCACGTGGCCACTGCTGACGCATGGGGGAGGGGTGGCA
TCGGCCATTCAAGACTTTCTTTCTACCTCTTTCAGTGCCTTTTTCACTGATATATAGCTTAAACCAGGTACAGAGATT
GCTCACCTGATTTTTGGTTCTTAGATGGTACCTTTTTGTGTGGATCATTGTTAAATTTTGATTCTTACAAGGAGGATG
ATTGGTGGAGGCTTCTATTTGGTTCATCTTGCTCTGCCTTTCCAAAATAATTTTTATTCTGTAACATGTTGCCCTGTTAC
CCACAAAATTGATAAACCAGACTTCCTTATCTTCAACCAGGTTGTTGGTTAAATGCAAAATTAGAATTCTGGATGTCC
TTTGAATCATGTTTCCAGGTTAATCTCAAGCTATTAATCAATACTGTCTGAGTACAGTATTTAACAGCAACCAGCAAT
TAATCTACCCAAGAGACTATCATCAACATCACATTTCAAACAACAAAATCAATGATATGGTTACAACAAAATCAGTG
ATATATTTAATAGTCCATGTTTTTTTTCTATAAATCAATATGCGTATCTGGCACTGTAGTACTCATATCTATCCCAT
TCTTTTGTGAAATTTCTCAATAACCTCAACTTTTGATTTCAAATGTTAGGCCCTATTATATTAAATGAGAATTAACACT
ACTTAATAATGTTTATATTAATGAATGGCCATTATGCTGTTTTCTGTGTTTTAAAAAAGTTTGCAAAAAACATTAATT
TTTTGCCTAAATATTTTGAACATTAGACATGTTATATTTTAGCAACCCTAATAATAAATTTTAAATTATTACACTT
AATATCCTGCCCATTTTGAATATTGACATCATAGAGCTTATGTATGAGACAGGTAATTAAGTAGTTAACATTTAGTAA
GGATGTTTTATGTGGCAGGTACTATTCTTAGCATTATACACCCATTACCGTACTTAATGTTTACACCAACACTATGAGG
TAGACACTTTTTTTAATATACTTTAAGTTCTAGGGTACATGTGCACAACGTGCAGGTTTGTACATAGGTATACATTGC
CATGTTGGTTTACTGCACCCATTAACTCGTCAATTTACATTAGGTATATCTCCTAATGCTTTCCCTCCCCCTCCCCCTC
CCCCACCACATGACAGGCCCCAGTGTGTGATGTTCCCTTCCCTGTGTCCAAGTGTCTCATGTTCAGTTCCACCTA
TGAGTGAGAACATGCAGTGTGTTGTTTTCTGTCTTGTCTATACTTTGCTCAGAATGATGGTTCCAGTTTCATCCGTGT
CCCTACAAAGTTATTATCTTTCCAGATGAAGAACTGAAGTTTCAGAGAAGTTAAGTGGCTTACCAAAAGTCACACGAC
CAGGATTCAAGCCTGGATAATGTGGCTCCAGGGTCTGTTCCCTTAACCACTATTTTATAATAAGGACTATCTTCCAAC
AACTCTGTATGTTACATACTGCTAGTTCAAAGCCAGGTAGACGAAAAAATACTCCCTGTTTCAGCTGAAGAAGGTTTT
CAATATATTTTGTGCTGCAAAATATAAAATACCACAAAGCCAATTTACATTAAAGGAGAATTGTACATTCAACACATCAG
CATTTCCACAGGATTGTAGAATAATATATTAGAACAATAATAGTGTGTAATAGAAATACAGTTATTTTACTTTGGAG
AATGGGCTTGGAAATGGCAGAGATAAGAATTATAAGTTATTTATAATTAGCTTAATAATTTCCGTATCTTATCTGCAG
CCATACAGAGTTATGTGAGTTGTGAACCTGGGATAGGACATTAAAGCTGACAGGGTTACATCTGGATCAGAAACAAGACA
AAAAAGATATGCTCTTCATGAGCCTCATCAATGCCCCAGCATATATTGTTATTGCTAGCACAACATTAGGGTTTTGTCT
TAAATTTTACTTATGGTTTTAGTGTATTTTAAATATTTTAAACAATAAATTTTATTTTACATAATCTCAATCAAGATT
TCATACTTATATCTTTGTTATCAGAGAATATTAATTAATAATTTTACCATGTACATAGAAGAAATAGATATATAATATGC
CTCATTTAATAATAGGGCTATGTTATTATAACAAGCATCTGCTCTGTCTTCTCTCAACAGACCAAATTAATCTTTGTC
CACATTATTCCTTGGACATTTGAGAGGTTAAATATATGCGCATATACATGTAAACCAATTTGAAAAATAAAGTTCC
CAAATGTTTATTCAAGTGTCTACTTTGTGGCAGGCACTGACCTGAGGGCCGAAGAAAAATAGGGAGGGTCTTTCCCAAA
GAAGGAAGAAAAAGGAACAGATGGTGCATGATTACCAGGTTCAAGTGGTTGCATGGAGTGCTCTTCAAGCACTGATAAAA
AGTGTCTAAATCAGATTAGATGGAACAATGTGAGATATGGCTTTTAGAGGATGTGAATCTGACCTCAATTTGAGAATGG
GTAGTAGTTACCTACATAGGGATGACCATTATGCAATAAGTACAGATACAGTTAATCCCACTTTTGTATAATGAGGGC

156/375

CTGGAATTCTTTTCATATCTAATGAAAGAATAAACCTCCTAGAAAGTCCATGCAGATTGTATGGTACACATTTTAATTGG
TGCCTAAGAATGACTGTAGTTGGAGAAAGGAAGGTGAAAACCTGAATAATATTCTTGAGCTGAGAATATTTCTATAGCCT
TACTTTAAGCACACATCTTAAATCCAGGCTAAAACCTCTTAGACTGGCATTGGCAATTAGCTATTTTCATGGATATAAACT
AAGGAGACTTGACGTTACCAACCTGCTTGGGGAGTATTTTGTCTGAGTCTATCCAACCTGTTATCAATTCGAGAACAATAC
TTTTTAATTTGAATCAACCTGTTTTTTTTTAAAAAGGTTTTTGTTTTAACTAAATTCATCTGTTCTCCCCACAAAAGCCA
GTTTGTGTGTACTTACATATCTCTATGTATACATGTATATATTTTTTGTAGTCTGCAATATTCTTGTGAGAATAATTTTGC
TTCCTTGAATATTTCAACTATTCAAAAATTTACTGGGTTAAAACAACACACACTTACTATCTCACAGTTTCCAAGGGTC
AGGAGTCTAGGCATGGCCTAGCTGGTCTCTGCAAGGCTGCAATCTAAGGTCACCTAGGGTTTCAGTTTTTCATCTGGAGGC
ACCACTGGTGATGGATCAACTCCTGAGGTCACCTCATGATAATGAGAGAATTAATTTCTTGCAGCCGCAAGACTGACGG
TCGCAACTTCTTGGTGGCTGTTACTTATATCAGAGGTTACGTATCAGAGGTTACATTAGCTCTTAGAAGCCATCCTCAG
TTCGCTACTACCTTGCCCTCGCCATAGACCCTTTACAACAAGCAGCCTGCTTCTCAAATCCAGCAAGAGAGGAAGAGA
GTGAGTTTGTCTAGTATGACTGGATTTTATATAGCATAAGCATAAGAGTGACAGGGCATCACTTTTGCCACATCTTATTT
GTTAGAAGCAACTTAAAGTTCTTGCCCATATTCAAGATGAGGAAAATATAAACAGTTGTGAATACCAGGAGGAAAGAAT
CATGAGGGTTACCTGATATCTGTCTGCCACATCCCAAAAAGAAAATCTATTTTCAGGCTTTGGTATCATTGTGAAGGTT
TCCAGATAATCAGGTAGTCAACATTAAATAATTTGTTTGAATGACATTTAACTATTGCAACAAAGGTGCCCTCTTTAAAA
AAAAATACACACACATATACACATACACTTTTTTAAAGCAGAGTCCAAGTGTGCCAGTAACTGTAGTATAGTATAAAGC
TTATTTTTTTAATGTTATTTATCTTTCAAACCATACAGAAAATAATTTTTATTTCAAATGATGGTTATATATTTTTTATC
ATTATTAATATAATACTATTTTTCTCAAATTTATCCCAAAAATTTCTCTTTTTTGTGTAATTTGATTGTGTATAGTA
TAAACTATAGGTCACTAGTTTTAGCAACTGATTGAATTTAACTGATTATGTGTTTGGATTCTTATATAAGCTAATT
TTAATTACATTAAATGTTTATAGCAGTTTGTAAAAAGAGATGCAATCGTAACATTTTATCTATATTTTAAATAAAC
AATCTATTTTTATATAACAAAATCTATAAGATATTGACAAGAATATTAGGTTATATTAAATGTTTACAAATGGTCTTT
TAGATTAAATAAGTTGCATTGAAATAATGTGCTTCAGTCTTTCAAATTCATTTTAACAATTTGTTTCAGCAAATATTTTA
TTAAGCAAGTGTCAAGTATGTACTAAAAGCTTACAACACAAGAGCAACCAAGTCACATATTATTGAAAGCCCTAAATAT
TCAGGGCTATGTTAGAAGAGTATTAATATGAAATAATGAATAAGGACATTAAGAGTCAGAGAGTTTAAATTGATATATTA
TAGGTTATAAATTTAGGGATCCTAAAATTTGGGATTGGAGTCCAGGTCCTCTGTATCACAGTTTACTGGCCTTTCACCTAC
CTCTTGTAGCTCTTAAGTAATAAGTTGCCTTCATTTGTCTGAGAGAGGGTGATCAGTGCCCTGCAAGTCTTTTCATGAA
GCAGTTATAGCTTTGTGTTGATCCATAGACTCTCTGGTTTGTTCCCATTGAGACCAGCTAAGCCATGAGTCAACAGCT
GATGGTTAGAGTTCAGCTTGGAACATGAAACAGAATGAGGTTAATGACACAGATCAGAATCAAGCCTGTGACTTTTGT
TTCATTAGTATCATGCTCTACATAAATTTGCTAGCCAGTCGTAGATGTCAAAGTAGAATTCATCTATACATTAGTTTT
TCTCTTCTCCTTTTGACCTCCAGCCGTGTAATGAAAGACTTCTTCAAGAAGGATGGCCGGGCATGGTGGCTCACACCTG
TAATCCAGCAGCTTTGGGAGCCGAGGCAGATGGATCACTTGAGACCAATAGTTCAAGACCAGCCTGGCCAAAATGATG
AAACCCCTCTCTWCTAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAG
CAGCTACTTGGGAGGCTGAGGCAGGAAAATTTGCTTGAACCCAGGAGTTGAGGTTGAGGTTGAGTGTGAGATGACACCAT
GCCTCCAGCCTGGATGGTAGAGTGAGACTCTGTCTCAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAG
CAAAAATACTATATTCCCAATGTATGCTGTGACTCTTAAAGTATTTACTAAATGTTGCCAATATCTAGAACATCTC
TTAAAAAATATTTCAAACATATCAGTGTTAACAATTAATGGTGAAACAACAATGTGATTAAATGGTGTGTTTTAAGTAGGT
TTTAAACCAATATATGTATGATGATGCTTGGCTTGTGAGACTCTAGTTATTAATGCATCGATTTTACCCTGGGAACA
CTCTTATTTCCCTACAGTTTACCTTTTAAATAAGTGACGTTGGCAGATGTTTTGACCAGAGTTATTATATGTCTTATTGT
TCACTGTATGTCTGGGACTTTTTTTTTGTTTTGTCATGAACTTGGCAGCAAATTCAAAACCTTTCTCACATTAATAAGCT
ACTGGTTAAAATATGTCAAGGGCAGAGTAGCTCATTCTGTAATACGGTTGTATATACACACACCTTTGTTTTGTTGTT
ATAGAAAATGCTAATTAGTATTTCTGATGACATGTGAGCTTGTGTCATAGATTATTTTCCACTTACCTTAGGTCTTGG
TGTATTAGGCAGGCTGCGAAGCACAGCTTGCAGGGGAGGGCCACCATTGTCTTTTCTCTTCAAATATTTATATAAAG
TTCAGGAAAAAAGCATTCCTCATAGATTATTTTTGTGACTGACTACCCGTATTTTGGGGTTTGTGTGGTGTGATGAGT
AGAGATTAAATAATGGAACCTAATTTGGTTATAGATAGTTCTGGGGACTAGGAGATTAAAGACAATAACAGATGTGGGGA
AAAATTACTTTTGTAGAAATATTCAAGAGAAATTAATTTAGAGAAATAAATGTATGTTTCATGTTTAGTTCAATGTTAT
TTTCAAAGGATTATGTACAAGAGAACCCCACTGTATTTTTTCCGGAGTGATGATGTTCTTGATAATTTATGTCACCAA
AAAGAAATGTGTTCTAAATAAATGAAAATTACCTTTAGAAAAATACCTGATTTACTCATACTTCCTATTAAGAGTAAGA
CACGAATATGAGAGGGGAAAAGTAATACAATCCTGACATAATGCAATGCCTTAGTCCCTAGTGAGGTAAAATATGTGATA
CATATATGTTTAAATGGACATTATTGTGAAGAATACAAGAACAATGACAGTTATTTATATTGCAACTTAGAAAGGATACA
AATGAATGGTTTTCTTTCTCAAACAACTGTAAAACTAAGGCCAAACATTTTCTTTTCAAAGGTCTGCTGAAGCTGAC
AGCTGCCACAAAGCTTATTTCCAGTGTCTTCCAATATGTAGGCCACAACAAGTTGTTGAGTCTCTTAAATAACTAATGT
CAGTTATTAATAATAAACTTTTAGAGTACTCTTAAATTTGATGATGACCACTCTTTCTTGGTTTTCTGGGACCATTTCTAT
TCTTCTTCTATGGACTCACCTTTCTTCAGTGTCTTTTTCTGATTCTCTTCTAATTTGTCCAATTTCAATCTCAGACTGT
TCCATTCTGCCCTAGYTGGTCTATCCATTGACTGACAATTCACAAATCTATTTCTCCAGCTTCAGCCACAAAAGAGAGTT
AATATGTCCACTCTAATCTCAGAACTCTTATAGAGAAATGTACAAATTTACTCAAGGTAGACAAACACAAGTACACTAT
GTTTTTGTACTCCACTTGAAGCTTTAATAGATTCTCTCCAATTAATCTGTCTTAAAACAAACTCTGGATTTACAACYT
TCAAACSTGCTCCTTCCCCAGAAACCCCACTTCACTCAATAGAAGCACTATAATTTGGGTTGCTAAGACCAAAACATCTT
CAATTTCTTTTCTTTCTTTCTTTTACACACATAC
CACACACCCCTATCAGTAAATTAACCAAGCCTTAACCTATCTTCCCTTCTCTTACCTACTTCTTCCACGCCGGGCC
AAGCCAGTTATCTTTCTAATTTGAAATAGCTTCCAATCTGCTATATGTATCTCCACACTTGCCATTCTACCGTCTG

157/375

[illegible]

Fig. 6.152

158/375

GGGGGGTATATATGTTGGGTCATTCAAATGTCATGAACTAGGAATTCGTTTGTTCATCTTTAGGAAATTTTCAGAAGTAGTTT
CTGACCATTTTATGTGGGTCCTTTATTTTCAAGTTTGTAGACATTGGGATTTTATCCTGAGAATAATGGGGAACCATTTGAA
GGTTTTCTACAGGGGACAAGGATAGCATGTTGGAATGACTAACAGATAGAAATATGCACAATTTCTTGAAATAGGGA
GAACGAGAAAGGAAGAAAGCAGAACAGTGGTCTTGACTTTAATGTGCCACCTAAGGGCMAGGTGCAGTGGGTACACC
SGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGTGGATTGCTTGAGTCCAGGTGTTGAGACAAGGCTGAGCAACATGG
TAAACTCCATGTCTACAAAAAATACAAAAGTGGTGGTGTGTGCTGTAATCCCGCTGCTCGGGATGCTGAAGTGGGA
GGATCGATTGAGGCCACAACATTGAAGCTGCAGTGAGCCATGATTGCGCCAGGGCACTCCAGCCTGGGTAAACAGAGCAA
GACCCCTTTGTCTCAAAGAAAAAATCCACCTAAGGAGCTTGTAAAAATTGCCGATTCTTGAACCTTACTCCAGA
GATTCCTGGTTCAGCAAGTCTGGAGAGGACGCATAATCTCCCTGTTAAGGGTTAGATTCTAAATAAGTGGTCTTCAGGCC
ACATTTTGAATAATACTAAATTAGAAGGCTGTCAATAATCTAGGAGTGAAATGGTGAAGGTTTGTATTATAATTTTG
GAAGCAGGGATGAAAGAAAGTGATGGTTGGTAGAGATATAGTGAAAGGAAGAAATGATAAGACCTAGAAATGTTTGGGT
ATAAGAAATCAAAGGGAAGAAATAGTTTTAAATGATATTAATGTATTTATCATATTTTGATATTTTGTAAATGTAACTG
GATTTGCAAGTCACTTAACCTTACTTTAAAAAGCCAGTGCAAAATWAAAAAATGTACAAATTTGTAACCAAGGTTGAAAA
TATAAGATCAAATGATGGGTATGGGAATATCTGTAAATAGGAAAGAAATTCATAAAAAATTAAGCTACCCTTTGTGTT
ATTTCCAAGTGTATTCTAATAATTAGTTTTCCCATCATGGATTTAATTAATTTCTAGTCAAGATTTCTGGATTTCTTT
AATCATTACCTTTTGAAAGTAGATGTAGAATTTCTCAATTATCTAAATCTTCCACATTTAGCTGAGAGACCAACTCTAGG
GAATATATTAGAGTATTTTCATAGTTCATCAGACTATGAACCCCAATTTCTAGTTAAGGCACATATAGCTATGGGAAT
ATAGTCCATAGTGAATAAAATATACAAATCATGGACCTTATTTTGAATAGCTTCCAGAACAAACATATGCGAACATCTG
AGGAGGTTATTATGGCTAGGTTCTAGCTTGCACTAATGATCATCAAGAATGGGAGACAAAAGTATAAGGAAAGGTTT
TCAGTAGAAATTATAAATATTGTTCAGAGGAATTAATTCAGTCTCAGGTTGATGCAAAATTTGGGTACAGTGGATGCTGCT
TCCACTTGTTTTCGGAAGCCGTAAACCAATAATCAAAGCAAGCAACTTTTCCAAAAGTAATTCATCTTGTTTTTTAA
AAAAAGTTTGAGTTTATTTAATATCTTCATTTAGACATGTGAACAAATTTGTTGCTTTTTTCATTAATGACATCTGAGT
ACTTGTGTAGATTGCCTTCATAGTTCATTTGAGGCATAATGCCTCAAATTAGGAACTGGAAATGTTTCTTTTTAAACAT
GAATATTGCCTAAAATTTGCTGAAATTACCAAGTCTTTAATTTTCATCAACAGAGAAAAATAGGCAGAAAGAAATTCAGGCAA
ATTGAAGAGTTAAAACGTTATGTATAGGTGAGGTTGAGTTCAGTGCATAAATACTGTAATATTCCTTTATGTTTTAAAGG
GATGTTTGGTTTGAGAGGGAATGCTTTCACCTTCTGAAAGGGAAGAGGGAGGTCAAATAGTGACAAAAGAAATGAGGACT
TGGGGGAAGTTTCAGCTAAGAGGACAAGCAAAAGAGGCTGAGAACAAACAGCAATTTGTGGTGGGCATGTTTGGGAGC
TGTAAGAGAATAGCTCTTGCTTTGGAGTAACTTCCTCAGTCAGAACTAGGTCTTGAATTCAGACCAGCTCTCATCT
CCTTGGTCCACTCTAGGGCTGATGGAGGCTGCTGAAATCATCTTTTGCTACATTAATACTCATTTTTTCGCTCAAAGATG
ACAAGGAGTATTTAAACGCAGAGAGAATGTTATTTATAAATGATGATTTGTTTCGTGATAGAACTTGCCACATAGTATTT
TCTCTTTTTTAACTTTTATTTTAGGTTTCAAGGGTACATGTGCAGGTTTGTATATAGGTAAGCTAGTGTGATGGAGGTT
TGTTGTAACAGGTTATTTTATTTTCATCACCCAGGTACTACGCCTAGTACCCGATAATTTATTTTTCTTTCTCCCTCCCT
CCTCCCATCTTCCACCATCAAGTAGATAGACCCTAGTGTCTATTGTTTCTTTCTTTGTGTCCACGAGTTCTCTTAATTT
AGCTCCCACTTATAAATGAGAACATTTACTAAATGGATCTTTATAAAAAACAGTTTGCCGACCACTAATGAATAAGAAAA
TATTAGAATAAAAAAGCTCAATGTCACTGATCATTAGAGAAATGCAAAATCAAACCACAATGAGATACCATCTTACTCC
AGTCAGAAATGGCTGTGATTAAAAAGTCAAAAAAATACAGCTGCTGGCAAGATTTAGGAGAAAGGACCAGTATTCGG
TTTTCTGTTCTGCTGATTGTTGCTAAGGATAATGTCCTCAACTCCATCCGTGTTCCCGCCAGTGACATTAATCTCAT
CTTTTTATGGCTGTGTAGTATTCTGTGGAGTATATGTACCAATTTCTTTTACCAAAATCTGTCAATTGACAGGCATTTAG
GTTAATTCATCTCTTTGCTATTGTGTAACAGTGCTGCAAGGAACATTCACGTGCATGTGTTTTTATGGTAGAACAAATTT
ATATTCCTTTGGGTATATACCCAGTTGTGGGTTTGCTAGGTTGAATGGTAGTTCTGTTTTTATAGCTCTTTGAGAAACCAT
CACACTGCTTCTACAATGGTTGAACATAATTTACTCTCCCATCAACAGTGATATAAATGGTCCCTTTCTCCTCCATCT
GACTGGAATAAGATGGTATCTCATTGTGATTTTGATTTGCATTTCTCTAATGATCAGTGATATTGAGCTTTTTTATTCT
AATATTTTCTTATTCTAGTGGTCAGCAAACTGTTTTTATAAAGATTCTGTTTAGTAAATATTTTAGACTTTGTGAGAT
ATACAGTCTCTGTCACTCAACTCTGCCACTGAAGTATGAGAGCAATCATTGACATTTACTCATGTAATTACATGGGT
TTGGCTATGTTCCAATAAACTTTATTTACAAAAACAGATAGCGAGCTGAATTTGTCTAATAGCCACAGTTTGCCTGAC
CCTGTTTCATTGCAGTATGTGCTATTTCTATTGTGAATGAAAAGGCTAGCTTAGAAGGCTAACTACTTTTTCTGGCTTA
GGAAGCTAACTACTTTCTCTAGCATAGTTTCTTAGAGAAATAGGTTCTCGATTAAAAATAGATAGGAACCTGACCCACA
CTGTATCTGGCAAATCTTTAACTAAAGAAATGTAAACGCTTTGGAGGTACCTAAATAGTGGCTAAAAATTGAGTTCC
AGTGTGTTTCTAATTATGAGATGAGGACACATTTTCTCATCTGTAAATTAGGAATAACAATACCTTCTTCATAAAAAAGG
CCATGGCTATCAAATGCCATCGCATAAAGTGAAGTGCCCACTGCAGCAGCATCTGACATAGTAGGCCCTCCAGTAAACAT
CTGTTTTCTCCCTTCTCCATTGCCAGGAAACACATATGGAATAGAAATAAAAGTAGAAAACAAAGGAGAGAAGAGGCAG
AACTAGTTTCAGTTTTAAATACAGAAGCTCTTTATCTCACTAAATATTCATTGCCGGCTTAAAGGCAAAGCCCTATT
ACTAGTTCAACACAGTTCATAATTTTCAAAGCACTACCCCTGTCTAGGTACTGTGGGAGTTCTTGGTTTTTTACTCCC
CTAATTTCTAAATTATATGTATAACATCATATATGGAATATAAATGTATATATGCGTGTATACTTAGGTATACATG
CATTATTTATGTAACAGATATTGTGCTGAGCATTTTACATCTATTATCTCATATAATCTTTACAGTAACATTGCAAAGT
TGATTCTGTTATTTTCATCGATGAAAAAAGCTGACAGAGGTTAATGTAAACCCATCTGTGGTTACACATCTAGAAAGTC
TTGGAGCTGAAACGGAACCTAGGGCGTTCTGGCTGTAATGCCCATTTCTTTAATAACCATGATAAATGACATCTTTT
AAGAATGAATAATATTTAACTGTGATGAGACTACTGATTTGGTTTAGATTTCATCTTAAAGTTACTTGACCAACATC
AAAGAAGAACTGGGTCAATTAGTCCAATCTGTGGTTTATAATTTGGCCAATTAGTCCACATCTTTGAATCTGCACAGGGA
CCACTTGACATAAATCTAGATCTACATTTGCCACGCTCCACAAAGCATTTCTGAACAATTCATCTGTGTTCAAAAAATGAG

159/375

ATTTCATTATTTATGCATGAAGAAAATATGCTGTTTTCCATGCACTGAGCCAGGGGGAAAACACTACTCAGCCTTGGTAA
TATTAGACCATGGATCTTCCATTTATTTTAAATGATAGTGTATGCTGAGGAAAATAATGGTTCATATCCTTCTTCTCC
TTCTCCAAATACATGTCAAACTACTTTGATTAAATAAATAAATCTTGATCACTGTGCCAACTCTGTAAGAAGA
CAGAGCAAGCAAGCAAACACATTAAAACTAAGGTGTTGGAGAGTCTGCCGTGACTTGTGAATTCTGTATATTTTTTCC
TTCTCGAAGTTCCTATTTTCTTTTCTTTTACTTACCAAGTACTTGGAAATTTAACAATTTAATAAAAAATAAACAGCA
TCTTTTCCCAATATTTAAAAAATGTATTATTCATTAATAAATTTTGCATTACAAAAAAGTGAATAATTGGGCTCCAAT
CTGAGTTAGTTTATGAGTGTCCCCAGGTACCTATCCTCTCTCTTTTGGAGAGAACATGTATTCTTGGAGACAGATTA
AGAACTAGTCTTCCCTTAATGCTGGGAGCCTCTTTGAAGTCTTATTTACTTCAGATCTTAAGGGAGAATTGTGGTACG
CTGAAAAGTATCACATTTGTTATCACTTGAGGAAACACCATTTGATCTAATGAGCTAGACTTTTTTCATCTTTCAATTCA
TGACAGCTATAGCTACATTAGAAATTGCATTTTGGAGGTCTTGGATAATTATCTAAAAATATTACAAAACCCCTTGGAG
GCTAATGAATTTAACTTGGATGGCTAATCCTAAATGGCTTTATTCCAGCAAAGTGGGAGAGAACTCCCTTCTTCT
GTTTATTTAAGGTTTCTAGTTTGGGGTCTGGTCTAGTTTGGAGTCTGGAGTTCCTTTCAATGTGTTTCCATAATAG
CCTGATTCAGAGGAGTCGGGGAGAAAGAAAGAAACAAAAAGAAATGCCTTGTTTATTTTATTACATATATACATACA
TATCTATACATATGTAAATGCACATGGTAAAGCATAGTATTTTGCACAAAATCTTAAGTAAAGACAGACTTGGGTTTA
GATTTATAATAGGATTTAGTAATACTAATAACCAATAACAGCAGCAGCAAATCTTGAGTGCATGAAATGGATTACTTTA
TGTAATTTCTGCAAAGTCTATCATGTATATTTTGTCACTAGTTTATTTTACAGATGAGGAACTAAGGCTCAGCAAAG
CTGTAAACTTGGCCAAAAGTCATGCAATTTTGGAGATTCTGATTGTCTGTCTGCTGCTTATACCCATCTTCTTTA
AATAGAACAATCATGAGGAAATTGACAATGTCCACAGACATAAGACACGCTTGACAGAGAACTAGGTATTGGGACACTGC
AGAGAGGCAGGCAGGGAACACTGGCCTGAAGTATGAGCTTTGAACTGGCAGTCTTCATTGTAATCCTGGCTTTGCCCT
TGCTGTCTGTGTGCTTCTGGATGAGTTACCATTCTGTGTGCTTCAGTTTCTTTATCTGTACAATCGGGATAGTAATA
AACTAATTTTTGAAAACAGCTAAAATAATGCCTGGTTCATAGTAAACCCCAATAAGTAGTAGTTGTCAATTTATTAGGT
TGGTGCAAAGTAATTGCAGTTTTTTTTTCTATTACTTTCAATCACAAAATCGCAATTACCTTTACAACAAGCTAATAG
GTATCCTGCCTGCTCTGTCTTATCCCTTTACCCTTTAGAGCAGCTAAACATTAGACGAGTGCCTCATCCAGAGATTTA
TTGCAATATTTTATACATCAGAACAGTTTGAAGAACCTGAGATAATATTGAGAAGATAGAGAATTTTCTCTGTCACTC
CCCATCTTCTATTTTAACTAGTAATTCTCCTCTCTTGCCTGCAAACCCCGCTTCTAATCCTTAGGCAACTGTCTCTGA
GTTCTTGTTAGTTATTACTAATTCCTGCTGTGATGTTTCTTGTATAGCTACAATGTTAGATGATAAGGAATATTATATTT
TAAAGTCAGATATTTGAGAAATAAAATTCATTCTCACTCCAAGAAAAGTTTCTGCATATCCAAAGGATGTGGGGGATA
GATATTTAGGAATATATGTGTGCCAGGATTGGGCAACTCGCAGCCAAAGAATGGAACAGGTTTACCTTGGATTTGAGAG
CTACACACACCCTTCACAAAATTTTATCTTAATTTGGTATTAACTTTATTTAACTATAAACTTTAAACTAAACT
TTGAGAGGAGGATGAATTTTGTTTTAAAGATGTTTGTAGTTATTTTGTAGCTCAGAGTCTATTTAGGTTCCCAATTT
TGTGCTACAACAGTTTTTAAAGTCTGCCCAGTTATTTAATCTGGGGAGATTACAAATACAGTGTGACGACTGGCCTGC
AGCTCTCTCTTCTGAAATGAGATATTCAACTCCACATGGCTTACTGCCTCTTCTATCCCACTTAGTTTCCATCTCTTC
TGCTGGTGATGATGTGAGTTCCCTACCCTGTGGGGTTACAATTGCCCTTATGGTTTTTCTTATACAATATTCAGCATTA
TAACATATGTAGGTTATAGAGCATATAATATATGAACCTGCAATATTATCAATATGTTGTATCTACCTGTGGGCTTCTTC
CTTCTCTCAGTTACCATATTTTCTTCCACTCAGTGGGTAAACACCATCTGAAATTTTCATGAATTTGCATAACCTTTC
CATTTTAACTACTTTTAAAAAATCATATATGATGATCTCTCTAAATCTTGCTATGTAAGTATGGTCCACAGATCTAT
GCATGAACATGCTGGGAGCTTATTAGAAATCTGAATTTTCAGCATTGCCCCAGACCTACTGAACCAAAATAAGTATT
TTAACAAGAATTGCTGTTGATTTACAGGCACATTAGTTTAAAGAAGCACTACACCAAAATATATTATTTGTCTTCTCTAG
GGGTTGTTTTGTTTGTCTTGTCTTATTTGTTTCTTGTTTTTGAGTGTATAAGAATGACATTCTGTTTGTGTCTTC
TGCTACTTGCTTTGTTTGTCTCAACAGGGCATTTTAAAGATTTCATCCAGGTTGCTTTCTGTAGTTGTTTCATGGCTTCTCTGA
TGTAACATTTGTGCTAATAGTCCTTCTGCTAAACACTTAGTTTGTCTTCTAGCTTGTGTTATAGTGATAATCTCTGCTA
TGAACAGTCTGGTGCATGTCTCCGT
GTGTTTGCATGTAAGACATTTTCTGTGCTGTGTACCCAGGAGTAGAATTATGAATTGTAGTGTATGTGAATGTTTACCT
TTACCAGATAATGGTAAATTTGTTTTACCACCAGCAGTATATGAGTTTTCATTGATCTACATCTTTTTCAAAATACATGGTG
TCATCAGGCTTTTTACTTTTTGCTGACCTAGTGGACATAAAATGTCTCTCACTGTGGTCTTTATTTGCATCTCCCTGA
TAACTAATGAGATTGGTCAATTTTTCATCTATTTAATTACCATTCTGTTTTCTTTCTGTGACGTGCCTTTTCATGT
ATTTTGACTATTTTTCCATTTTTCTCTCATTGATTTCATAGGAGTACTTATTTTGAAATAGTCTTTTGGAGATTACATGG
GTTGCTATGTTTTCTTCCAATTTATGACTTATCCTCTCACTTTCTTGATCACTCTTGAATAGAAGTTCCAAATGTTAGT
ATAGTTTATCAGTCTTTTCGCTGTAACCTGCTTTTGTATCTTTTTAAAAAATCCTTCTTGCATGAATACTATAATACTAT
TCTAATAATTTTCACTGGATGGGTGGTTTAAATACATAATTAGAGCTCTAGGATGATATTAAGTAAATATTAACCAAGTC
TTCAACTGGTATTCTTAAATAACTCATCAATTGGCATTTTACTTTCAAAGGCCTATGTTTAAATTTCTCCCATTTGTCA
TCCAGGCAAGATCACAAGTTTGGACTTAGCTTGACGAGGCTCAAATCCAGGCTTTGAAACAGCAAGTATCTGACCTTA
GTTAAGTAATTGTCCCATAGCTTCAGTTTCTCATATGTAAATAGTTGCTGCTACAATTTCTTATTTTAAAGAAAT
CCGTTAATTACAATAGTTGAGTCAATTTAATGGGAGCTTTTAAAAATGAGAAGTATTTAGTTTAAATTTTACATTTTCTTA
AGTGAATTTAAAAATGCATACATTTTGCCTTACCAATGCTTACCTACCACATTACTTTTCATCATCTCAAACTATAAGAT
AAGCTCTTTCATGATCTCTTTTACATTTTGGAGATCAAGAGTGACATTTTCAAGGCATATTGATTCAATTTTATAAAAAA
TATAATTATCAACCACAAAAAGTTAAACATCTCTWAAAAGTTAGCTAAGAGCTTGTGACAGATGGACATTTAGCAACTG
AGTAATCATCTTTCAGGTCTCACAAATCTGTCACTTTGAAAGTTCTATGACATCTTCTGAGGATTTGGTAAATATCTAC
TCATTTTAACTGTATTGCTGCTGTGTGACTGGCCATGATTTTATAGACATTTCAATGCTAAAGCAATATGCAGCTTCCA

160/375

ATATCATTCTTATGAATATCTTGTGCTTTTCAATAAGATATGGAAGTGCAGTTTTCTCCCAGGAAGAAATATTTTTT
CACTTATAGTAAATCTTTGTCTCCTACCCATGTTTTAATTTCTTCTATATACAAAATAAAGTCTTCAATGAGG
TATTAATAATTATAGTATGAACTTTTGAAGACATTTTAAAGTAAATAGTGTATATATATATATGTGTGTGTGTGTGTG
TGTGTGTGTGTATATATATATATATTTTTTTTTTTTTTGTATAGGAGTCTTGCTCTATTGCCTGGGTTAGAGTGCAGTGGTGT
GATCATGGCTCACTGCAACATTCACCTCCCCGGGTTCAAGCAATTTCTGCCTCAGGCTCCAGAGAGGCTGGGGTTACA
GTTGTGCATTACCACACCTGGCTAGTTTTTGTATTTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTTG
AACTCCTGACATCAAGTGATCCGCCACCTTGGCCCTACAAAGTGCAGGATTACAGGCATGAGCCACTGCACCCAGCCA
AATAGTCTTAATTTAGTTAAGTGCAAAGTTCATCAATCTGTAGCTATATGAATGCAAGTCAGAAATCCAAAGTCTTTAC
CATGACCAGCATGGACTTCCTTGATCTGTCAATTTCCAAACAGCTTTTACCTGACTTCATCCCAGGCCACTGGTTGATTT
ACTATTCCTCAGCCATAACAAGCTGGCTGCCATGTCTTTGCACTTGATTTTTCCACAGCCTGGAGTGTCTGGCTTACTCC
CTTGCTTCCTTCAGGCCACTCTACCATTACTCTTTTGGATAAGCCTAACTTGGCCAGCCAATGCCAAATAGCACTCCCAA
ACATCACACTCCAACCTTCTTAATTTGCTTCAGTTTGCTTCATAACACTGAGCTCCTGTATCTGATATTATTATTATATAT
TTCTCTAATTTAAAGAAATGGAATAAACACTTAAGCATCTATATATATATATATATGTGCTTAGGTGTTTTATTCTGCTTTTTTAA
TTAGAAGAGGAGGGCCAGAACTTTTCTTTATTGACTTTTTTATCTCCAGAACTTAGGGTTGGCACATATTAAGTGCTCA
ATAAATATTGGTTAAATGGCTGAATTAATGTTGAGACAATCAGGTGAACAGGTGTTTTCTATGTAGAGTTAAGAGTCCA
ACGGGCTATTCTCAACATTGGCAGAGGACTAGCACAGTTCTTTAGTCCCCACTGAAAGACTCATCTGATCATTATAAT
GTTAAATGTGATGAAAAAGCATACTGTTGCAAGAATTAAATAAAATAATGTATGAAAAATGTTTGCCAGAATCAGAA
TATCAAAATGTTAATTTGTTCAATAAATGCAATAAATTAATTCATCTGAATCAATCCTTACCCCTTCTTTCTGTAAC
AGTGGAAATGTTGGCTTTTTCTAGTTTGGGCAAATGCTTCCATCTGTGCCCTGCAGTTCAACGCCCCCTCAACCCCATC
TTCTCAGGGACAACATATTGTTATTTCTTCTCTGTCAATCTGTTATTTCTCCCTCTCTTTGCATCCTACTCATC
AACTTTAAACCTGCTCCACTCAGAAAGGGGTCCTTTTGATAATGTATACAAAGTCACTACATTGCCTTTAGGGGACAC
TGAATAAGAAGTAATTTCTTATCAGGCTTCTGCTTATTGCTCAGCTGTCTTGCAGGTTTATAGACTTATTGTCATTT
TCTGAATGTCCAATGCCCCACAATATCTCTCATCTAAGTTATTGTCTGCGCCAGTCTCTGCCCCAAATGCCTTTACT
CCTTCATCTCCCCAAGACGTACACACATTCATGCTCACACATATGATTTCACACATACTGAAAATAGCTAATTTCAATG
TGTACTTGAGGTCTTGGCCTCAGATTAGATGCCACTCTCCCTTTGGTGAGGACTCACTGAGCTGTAAGGGTTGAATGTT
CTTCCAGCAGACACTACATATCCGCATCAGTATATCTCTTCCCCCATCTTCCCAAATTATAGTTGCTTATTTATTTAT
TTCTCTGCAAGACACAAAACCTCCTTGAGGATAGTAATTTTTTGTGCATGTTTGTCAATGCAGTATCACAGTCGTCCTG
AGAATTAGCACACAGTAGATAAGCAATATTTTTACCTTGAGCTGACAAGTGGAAATGGTATCATTAGAAAAGTTACAAAT
TGATTTTGTGATACTGAGCCTCCAAGTAGTTGGAAATTAGTGTGCTGCTAAATTTGCATTAGTGTGCTAGTCAAAGACA
AGGATATTCAAGTACAGCATTTCTTAGTTTCATATTAATTGCATATTTCTGTTTATTTTCATATAGACAAAATTACTG
AAAAGCAGCCTAATATACTGCGTTGGAAACAATATGATAGAGACTTTAATACTAGTACTTGACTGRCATTAAGTACAA
TATTATCTTGATATGTATAGGTTTTTACAAATTTAAAGCCTTTTCATATATCTCAAGGAAATATCCTAAGAACCTGT
TCTACTCAACATTAAAGACCTAAGTGAATCTGAGACTTTCAATGCCTTTGGATATGTAATTAGACAGGAGTTTAGCCT
TTTGTAACACATATGATGATGAAAATTTCCGATTTTAAGCTGACTGTTGGGCATCAAGATGACCATCTTTACAAATGAA
GTAGCACTCATGCGCTCAAGTATACATAGAATGTATGCAAAGTGAAAGTCTCCTTTAAATCTTCTCCCATTGACTTGA
GCAACGAGAACACGTGGACACAGGGAGGGGAACATTACACACTGGGGCTGTGCGGGGGTGGGAKGCTGGAGGAGGGAT
AGCATTAGGAGAAATACCTAATGTAAATGACAAGTTAATGGGTGCAGCAACCAACATGGTACATGTATACCTATGTAA
CAAACCTGCACATTGAGCACATGGACCCATAACTTAAAGTATAATAAAAAAAGTAAAAAATAATCCTCCTCCCATT
GCCAAGATAGAAATGGACCCCTAGTTACTGCCACTTGCCATCTCACTCTGTGTTCTGGATAGAAATGGTGTCTGCTCTC
TGCTAGCTGTTAATTGACATCACTTCTGCCAGAATCTCCATCATTATTGACAAGAATGTTCTCCCTTGTTAATTGCCC
AGCAGCACATTGAGTGATTGATTGTATCTTTTGGACAGATTGAAATGCATTTGCAGAAAAGGGTGGGGGTGGTAATGA
CATAATGCATGGTAATGACACCAACTAAGTCTTAAAGTTTAAAGTTTGGTTCAGGAAAAGATACTGATCATTTACCTGATTT
TTACTTTTTATATAGATGTGCTAATGGTAAGTAGTGATAGCTTTCCAGGATGTCCACATTAACCCAATGCTTTCACAAA
AATCTCTCTCAGACTGTGCCATAAACTCCAAATCTATGGTCAACTAGTGGGAAAAGAATGGATAATTTATTTAAC
ATATAAGCAGGGAAAACCAATGGGTAGATGGAATATTTTACATTTTTTGTGTTTAAATTTAAAGTAGGAAATACCTAGA
TTAATGAGAAGAGTTTTTAAATGGAAGGCTGGGAGTGCTCAATATTCAGCAGTATAAGATTTTCTTTTAGCATAGAGGC
AACTAGAGTAATACATAAAGTGCATATTTTCATGAGAACTTTGCTTATAAGCTGGACTTCCCTAGAAGTATTTGAGACA
CAAGGGCGAGTCAACTAATAGTATCTACAGTGTTTTTGCAACCATTAAATGAGAGAGTAAGTCTGGATCAGTAGTTGCT
GATGTATGAAATCACATGAAGAGTTTTTAAATGCGGATGCCTTGATCCTCCCCCTAGAAATACTGATTTTATTGTCT
AGGCAGGGTAGTGATGATCAAACTTTACACTGAAGCAGCATCTTCTCACAATTTGGTAAAAAGTATAAAGCCTCAAGCC
CTATCCTGCTTCATGGAGCCTGGGTCTTTGTGTGCTGGATTAGCTCTCCTGGTGATTCTGATAACATCAAAGTTTGAA
TCACTGCTCTAGGTTCAACATCAGACATTTTTTTTCAAGCTCCCCCAGGTGATATTCCTAGGTACAGCCAGCTGGG
AACTGCTGATTAACATGATATTTAGGATACTTTCCAGCCTGGCAGGAATAATAAAATTTGCTACCTTTATTAAACATTC
ATTGCATATAAGGCATTGTGCTAAGTATTATTTTATTAAATAATTGCAAAATTTCTGTGAAGTAGGTAATATTAGTACTA
CTTTGCATATGGGAGACAGGGATGGTAATAATTTAGCTAAAGTAACATGGGTAGGAAGTGGTAGATTGGAACCTCAAGC
TGTAACCTCAAAGATCACACAAGAACTATTACTATCAATAACATTTTGAATTATAAGTTAAATTTAAACTCTACAA
GTTGGAACATATTAAATGATTTTCTTACATTTTAAATGTTTCTGACTTGCAATTACATAGTAAAAACAAAACAAAGA
ATTTTTTAAATCAGTGGGAAATATATAAAGATAAAGTTTTTCATGAGTAAAAAGGAAGGAGCAATTTGGTGGTAAAA
TCAGGTTGGATTGAAATTATCCAATTTAATCTGGAAAAAATTATAAGTCACTTGTAAGTTAGTATGAGAAATTA

161/375

[illegible]

Fig. 6.156

162/375

[illegible]

163/375

CCTCGATCTCCCAAAGTGGGAATATTTTTCTTTCTGGGCTTTCCCATAGCTTTTCGTATATTATTTGTACTCTAGCAGT
TATCAATTGCGAGTTTAAATTATTTGTTTATGTGTTTCCCCATTAGGTATATTAGGACCTTGCACAGTGAATGGTTTTA
TATAGATTTTTAATAAGTGGTGAGCTTTTAAATGTGGAAATAATAATGAAACCTTGTCTTTTATAGTTTGTGCTCTCTCA
GACAGGATATATTTGATTTTCTTAATAATCTCTTTGAAACACACAGAGTTAGTGATTATTTTACCCATTTTATAGATGA
TGGAAAGGAATATTGAATCTCAGAAAAATAGACACATATTCATGTTCAAAGATAGAAGCTTGGACTTGAGCCAAAAAGGT
CTAGTGATCTTTTTTATTGTAATGTAATGAAACAAGAGATACTGTGAGTATAGGTTGGTATGAGGAGAAGCAGCCTATA
ATTTGAGTTAAGATTATGAAGACAGAGTGAAATTATAATATTATGAAGAGAAATAACAGTTTTGATCTAACTTATGAAA
AAAAAAACAACATGTAAGAGTGAAATAACTCTGATGGGATAAAGCCCCCTTTGTAAATTTAGAGAAGTGCCCTCTACAG
AGTAAATTCCTTAACCTTGGGTATGTGGCTCTACAAGATTCAATACATTTGGAGGTAGGCACACATTTCTTAGAGAATG
TTTATCCAATTCCTCAATGAGTCTTTTATCCACAAAATTTAAGGCACTGTGTTCTAAAGCTAAGTTATTGACTGCTTCAC
TAAGGGAAAAATTTATGAGAACATAGTATACTAATGGAGTAAGATTATCGTTGGGGTGGCTGAAAGTAAGCAGTTTGAAA
TGGGATTTTATGAAAAATGCAACACTTCAGACAGATAAGGTGAGAGGCTTATTTAAAAATGACAATCCCCAGTGGGATTT
TAGGGGATTACTTGACTTAAATTTAATTTAAATATAAGGATAGTAAAGAACATTTTGAAAAATAAAAAGACTGTTTT
TCCTTATAAGATAGCAGAACATATCATATAGGCTATTAATTCAAACAGCATGATAAATTTAGAAAATAAACCAATTAT
TCAACCAACTGGATAAATGGTCAAGAATAAGGCCCATGCATATATTGAAAATTTAGGGTTAGTAAAGGTAGCAGTCCA
AATCAGTGAGAAAAGGATAAATTATTTAATATAGGATAAATGTTTAAATGGTTTATGGAAATAAAAAATGATCATTACT
TCATTCATACTATAATAAAGAGCACTGGATAAAAAAGATTAAAAACTCAAGAGAAAAACAGATAAAGGCCATGAACAGA
AAATTCAAAAGGAAGAAAAATGTATGACAAATAATACATTTGAAAAGTTTTTCTACCTGACAAAACAGACAAAAGAAATAA
AAACTGAAACAATTTTTCTATCTATCATTTTGGAAAAAGATGAAAAATTTAAAAAGAAATTTGAGATGGTATACAGACATAG
CCACTTTCTTATGTACATTTTTCAGTGAACAATATATCAGGAAATCAGGAAGTATAAATCAGGAAAAACATTTGGTGGGTGA
TCAAATAATATATATCAATATTTTAAATGTGCATACTTTTGTCCATTAATTTCTATGTTTAGAAACTTAGCCTAAGAATA
TAATTTGAATAAGTGAGCAAGAAATACTATATTGCAATATTACATATAATAGTATACATCTGAAACCACCCAAATATC
TTTCAGGACAGAAATTGTAAATAAATGATGATATATCTGTATTGAGATCTGTATGTATTGAAATTTATGAAATGTTAT
TTTAAACTCTACAAGTTGTTATGTGGAAGCAATTTAGAGAATAGATGACAGAATATGGTATCATCTACCAGTGTGT
TTTCATGCATGCTTATATTTACATATATGAGATTATGTCTATGTACATGTGTGCCCTATAGTTATGTATGTAGGTGTATG
TGTGGTATGTGTGTGTATATATATATGTGTGTGTGTATTTATATCTATATACATATATATGTAGAGTGAGAGAGAGACA
GAGACAGAGACAGTACTACATATATATGTAGAGAGAGAGAGACAAAGACAGAGAGAGAGAATACATATATATTTCTGTCT
AAGCAGGAAAAACCACCAACTGTTACAGGTGTGTGAAGAGAGGATATTTTGAGAGGTCTTTGATTTTGTTTTATGTTTCT
TCTTCTCTTACTCAATTTCTTTTAAATGAGCATGTGTTGTTTTTATAATAAGCAAAAAATCATGTATTTTCTCCTTTTG
TAAAAACAATATTTTCAACTTATTTTCGTTTAAATATATTTCACTTGTATTTCACTTGTCTTACCCTTCAAAAAAGCA
AAGGATTGCGTTTCATAAAAAAATTTAGTAAAAGATAAACATGAGGACATCAAAGAGAAGAGAAAAATGGCATGAAAATA
GTATGAACTATGAAAGCAAAATTCATTTCAATTAATTCCTGAGTAATTGCTAGAAACGAGTCACAGACTGGTTCTGATC
TTCCTATCAACTAATCCAAGGAAGGGAACACTGTTGCTTTAAGATTCAATATCGGTAAGTTAAAAAATGAGTTGCTTG
GTAAATATATTGCTATTAACTCTGAGAGTTAAAAGAAATTTCTCTGTGTTGTTTATATAAAAAAGATGCTATGTGAT
ATGGTGTGTGCAGTTTCAACATTTTCTATAGTTTCTATAGTTTGAATAGATATAAATGTTTCTTATAACTGTGACT
GATTTCTTATAAACTACACATTTGATGGCCTGTTGTCTAAGTTCCATTCAATTGAAAAATCTATCAGCACTGGAGCCCCAGT
TAGCATTCTTAAACAGGGCATTCTCTTTAAGACTGAACACTAAGTGTGCACCATTAAAAAGAGCTGCATTCTTCAACTTG
GAAAATTTCTTAGACTCACTCTCCTGTATCCACGTTTCAGCCTCTTGTCTCACCTGAATACCCGAATTTGATTTGGA
TGCTGTATGTGTTCTCTGGTCTTAAAGATTAAAAACTAAGGTCTTATTTTAGTTTCTTGCTCAAATATTGCTTTTTTGA
CCTGCTCTGTTCTCTGTAAGTGTAGCCCTCAAGCAAGCCCAACCTAATTCCTCAAGTGTGGCTCAGAAATCTGGGACACCA
GCCCAAATTTGGGTCTTCTTATTTGTGATAGAATGGAACCAAGGAATAAGAGAGGCTGGGCATCTTGGCTCACGCCCTG
TAATCCCAACACTTTGGGAGGCCAAGACGGGCAGATCACTTGAGGCCAGGAATTCAGATTAGCCTGGCCAAACATGGCG
AAACCCTGTCTCTACCAAAAAATACAAAATTTATCCAGGCATGGTGACACATGCCCTGTAATCCCAGCTACTCAAGAGGC
TGAGACACGAGAATTGCTTGACCCCTGGGAGGCAGAGATTGCAGTGAGCCAAAGATCGCGCCACTGAACTCCATCATGAGC
AACAGAGTGATCCTCTGGTATTTTTTCTTAAAAAAGGAAAGGAGAAATTCAGTGTTGGTATCCAGC
TTTCTGATTTTCTGACATGAACACCCCATTTGTCTCGATATTTATAACATATCCACTTCCAGTTGAATGCACCAAGATAA
TCTAGTTGCAAAATGTAGCCCCATTTAAATACATGGATTGACACATTTAAATATAAGCCAGTTAAATGTTAGAAGTTACT
TACCAAAAATGAGGTTGATGTTTTAGAATAATTTACTCACAGCCCTTCTCTGAAAGCAATTAGAGTAATACATTTTT
AGTCTATCGAGATTGTCCAAATTCATGATAACAATATTACCTAGTATGCAGGTGTGCTTCCAGCTCACTTGGAGCATT
TTTAAATCATTTAAATATAAAGTAAAAGTTTGGACTCTTCTATACACACATTTTATTTTACTACCCTCACTCAATCTCC
CACCACCTGGGTTTTTCACTTTTATTGAGGACCAGTTTCTTGTCTAATGATCAGTAGGCAGGGGCTCTACTGTCTCCAGAA
ATCATGTGGTTACTCATCAGGCAGCTGCTACTACAGACACTGAAGAAAGATCATCCAACATGGATAAATACCCGTGTTT
TTATCAGATGTTTGAAGTAATAGAGTATAATGATGCCCCCTCATGTAGAAATATGGTTCTAAGAAACCCATACTTATAT
TAACTCAGAACTGCCATAAATAGCTGAAATATCCAAATAAATCAACAGACCCACAGTTTGTGAGAAACAGAAGGATGT
TCATGGCTTCAATGGGATAGGCCAAACTTTGTGTTGAATTATGTGCTTCTTTATGTCTTGTCTTCTGCTGAAATGC
CTTTTCTCCACAGCCATTAGTGTTTTATAACACCTACTCATACTTCAGATCTTGATTCAAGCATCACTTCTTTTGGTG
AAGTATTTTTCAGATCTCCCAAACCTGTCTAATACCATATAGTGCTCCTTTATATTGTTTATTATATTTTCAATTACAT
GTTTAAATGTATAATTATTGATAAGGCCAATTTCTTTCACCAAACTATAAACTCCTATGAAATAATGACTCTGTCAAT
TTTTCTCACATTCAAACACAGTATTTGTACATTGCTTGAAGTAAAGAAATTTAATAAATAATTGAAGTCCAGGGTTA
CCAATTTTATGAAGTTAGGAATATACTGTTAAAAGTAAGTAGAAAACAACTCCAAATTCAGACAACCTTTACCATGTGC

164/375

TTTATTTTATTAAAGAGTTAAAAAATAACTATACAATTTATTTTATGTAAAAAGACACTTCAGTTTACAAATGCAAATAT
CACCTCTGGAAATAAACCTAAAGGACAGGAAGTCATTGAAGAAGTGGCACCATTGGATTGCCAGGATGATGATGTTGCAG
GAGAGTTATATTTAAGGAGACGGCAAATAAAAAAATGATAATAAGGACATTAGATACTAATTTCAATGTTATTTTGTGT
TTTGTCTTATGATTATTTTAGTGTTTATGCATTATTTAACATTTATTAATAAATTATAAACTCTGGCTCAATTCATT
CTGTTAGCTTGGTTTAAACATATATAAAATGCCACAGCTACTCCTGTTATTGGCATCTGGTAGTCTGCATGACATTA
AGACCCAAAAGTAAAAATAAATAAATTTCTTGACTGAGAAAATAATTGCCAATTCAAAATGGTCTACTAACCTTAACAT
TCATAAGAAGAAGAGTATGTATCATCATCTCGGCAAAATGGCACTTATAATTCATAAATGCTCCTTTTTAACTTTATG
TATTATTTTTATTTTGGGGGTAGTAAGATGTGGAAGCTGTTAGATAGTCATTACTTCTGTTGACATGGAATATTTTATA
AACATGAAATATTTTCAAAAAAATAAAAAACCAGTAATAACAGGTCACATACACACTCAATAATCTCACTATAGCAATA
TTTCAGAAAAAATGTATTTAGGGAAAACAATTTATGTCTGTGTTTGTGTTTATGTCAGTCATGACATGAGGACCCCGA
CTCAAGTGCATTGCCATTTACTCCCTGGTAGAATGTGATTTTATTTCCAAATGAGCTCAAACATAATGATTATATGCTT
ACTAATTATACAAAACATGGTGAAGAGGTAGTGCTTTTGTGATGTCACATATCAAAAAATGCTTTCTTTTTAAACATTTT
CCCAGAGATTGTTTTAACTGATTCGACCAAATTAGATTATTGACTTGACAATAATGAACAAGATACCCCTTTGAATTTT
TGTCAGTACATCTTTTTGTAACCTATGAAAAATTTTCAAGCCAGGCACAGTGGCTCACACCTGTAATCGCCGTACTTTAG
GAGGCCGAGGCGGGATTATTACTTGAGCTCAGGATCTCCAGACCAGCCTGGACAACAGACCAAAACCCCTGTCTCTACAA
AAAATACAATAATTAGCTGGGTGTGGTGGCGTGACCTCTGATTGGTCCCACCTACTCAGGAGGCTGGGGTAGGAGGAT
CGCTTGAGCCAGGGGTTCAAGGTTACAGTGAGCTATGCTCCTGCTGTGCTGCGCAATCCAGCCTGGGCAAAAGAGTGA
GACCTGTCTCAAAGAAAAAATAATCAGAAATGTTTGAACCCATAAAGTAGATAATGAGGACATAGTGGGAGTATGTAG
AAAAGCAATAACAGGCCAGGAGCAGTGGCTCACGCTTGCAATGCCAGCACCTTTGGGAGGCCAAAGCTGGTGGATCACAA
GGTTAGGAGTTTGAGACCAGCCTGACCAACATGGTGAACCCCTGTCTCTACTAAAAATACAAAAATTAGCTGGGCGTGG
TGGTGTGCACCTGTAATCCCAGCTACTCAGGAGACTGAGGCAGGAGAAATCGCTTAAACCCGGGGAGCGGAGGTTGCAGT
GGGCAGAGATTGCGCCACTGCACTCCAGCCTGGGTGACAGAGCGAGACTTTCTGCTCTCAAAAAACAACAAAAACCCAA
AAACAATAACATATAGCAGTGTGGCCCTCAAGCAGTCTGGCAGCCCTTTTTATTGCTTTTGGATGCCGTTTGTGTCTAAG
CATTTGCTTTAAATATTTGATGTAGTTAATTAATGAGTATTTTGGATCTTCTATTATACAAATCTGCCATGAAAAATA
AATGCAACAAATTACAAATTTCAAATGATAGAAGACCAACCGAAATACAACGATAATGTCTCTCAAATGTGCACATAGT
AGTTTAAACAGAATATAACTGCCATCTGATTATTAACAGTAGAAATGTTTAAAGTAGATAGTTAAAAACTGTAGTATCT
AATGGTTAGTATTTTCCAAGACAGTAGCCTAAGAGAGTAGTTCAATATATACGGAGTTCCGGCTGTGGAGGATGGGGCT
GGTAAGGAAAAGCAAGAAGAGGAAATAAGGCTTTGCTAAAGATTCTCTTAACTTCCCTATAAGATGTTACAGAGGCACTG
ATTGGTTTTAAGCAGGGAAATTATGTGGATAGTTTGAATTTTTTAACTTACTTTTGGTAGGGCCGGGCGCGGTGGCT
CACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGAGCGGATCACGAGGTCAGGAGATCGAGACCATCCTGGCTAAC
ATGGTGAAACCCCGTCTCTACTAAAAACACACACAAAATTAGCCGGGCGTGGTGGCAGGCACCTGTAATCCCAGCTATT
TGGGAGGCTGAGGCTAGGAGAATGGCGTGAACCCAGGAGGCGGAGCTTGCACTGAGCCGAGATCGCGTCACTGCATTCCA
GCCTGGGCGACAGAGCGAGACTCTGTCTCAAAAAAATAAAAAAATAAAAAAATAAAAAAATAAAAAAATAAAAAAATA
TGGAGTGGGAAGAAATTAAAGGTGTGATTTAGGTGTTTTATTGTCAGTAAACCAGATGAGAAATAAATGGTGATAGTCTGA
AACTGATGCTGTGGCAGTAAAGGATGGACATGGCAGTAAAGAGATGAATTTAAGAGAGGTTTTTTTTTAAAGTGGAAT
GATAGATCCTGTGACTGACTGACTTAATGCTATTAGATAAAATAATTTTTTAAATTACATGTATTTCCAAAAGTACAA
TTAATGAATCCATGGCCAGGCATGGTTGCTCATACCTGTAATCTCAGCACCTTTGGGAGGCCGAGGTGGGCGAATTGCTT
GAGCCCAGGAGTTCAAGACTAGCCTGGGCAATATAGCAACATCCCACCTGTATTTGAAAAATAGTAAGTAAGTAAATA
AATAAAAAATCCATAAGTATTTGGACACCTAAGGTAAATTTAAATCTTGCAGTTTTGTTTTCTTTGTTCTTTGTAATT
TTTAGCTTGTTTGAGTGGGGGAAAGTTTGAATATTGGGTAAAGGCAACATTTGAAAAYGCTCATCTGCAGAGGAAATT
TGCAGTGTGTGGATAGATCACTTGTTGTCATACGTGAAGCATAACAAATGCTTTTTGATTGTGAAAGCATAGGTAGAT
ATATTGCATTTCAAGGTCACCACTAATTAATTGCAATTAATTTAGTTAAATTGGTTTTCTCAACTCATCTGAAAAGATGA
AAACTAACACTTCAAACTACTTCCCTCTGGTAACATCATAAAGACAAATGAACCTTTCTTTTTAGTCATTTCCCTCCTT
CCCCGTCTGCCCCCTCTCTCTAAC TAGGAAGCTACTACACCAGCCTTTCCAGCTTTGGTTTTCTTAATCTTAATATT
TCTGTACCCATCTATCACTGGAAATCTTCAAACACTGATGTGTGGATGTGTGTGTGTCGGGGGTTGAGGGGTGAGTTT
GGGGAGTGGTGCTGTGTGTTATTGCAAAATTATCCTTTTTTCTTTTAACTTTTGGAACTTTGTCTAAAC
TTTTCTTTCTTTTTTTTTTGGCAGAATCTTGCTTTTGTCTTACAGGCTGGAGTGCAGTGGCGCGATCTTGGCTCACTGCA
ACCTCCTGTGCCCGGCTTAGCTGATCCTCCCACCTCAGCCTCCCAAGTAGCTAGGACCAGAGTTGTGTGCCACCAATG
CCCAGCTAATTTTTGTATTTTTTGTGGAGATGAAGTTTCCGGAGATGAGGTTTACGTTGTGGCCAGGCTGCTCTTGA
ACTCCTGGGCTCAAGCTCCGCTCCCAAAGTGTGGGATTACAGGTGTGACCCACCATGCCCTGCAAACTTATCTAAGC
TTTTTTTTGTTCTCTCTTT
ATAGATATACATGTGCCATGGTGGATTGCTGCACCTATGAACATGTATGTTTATTGTTTAAAGCTTTTTTATCCTTTTTA
TCAATTGTATGTTTTTAAAAATCTCTGCCATGTGCTTTTGCCTCTGGCTAATTCTATCTGCATAGACACCATAATAATC
TGTTAATCACACTTAAACAAGCCTTTGCATTTGATATACCTCTTACAAACAACCAACGAACATGCAGGCAAAACAAAAC
AGCAACAACAATAAACACTTCATAGTCTTTCTTTTGTCTGTTTCTCTAGGATGACTATTCTTAAGACCCACACCTGACA
AGAATAATCTTTAATTTTTTCAATTTCTTAGAATCAAGGTATTGTGTTTTTATGTAGAGTTGTAAATATGGTATAAGCA
AAGATACTTGCTCTCAAACCAGGATTTTATATATATTTTCAATTTTTGTGGTTCTATGTATGCATTTTGGCTCTAAAT
ATTTGTTTTTCAATAATACCATTAAATGTGTAGGACAATTACTATGTATTTTTGTTGTTGTTGTCCTATCCTTTTCTTTCC
CTTCATCTTAGTATTAGGATAAGTATGCAACAGTAATTTTCCCTTTCTATGAGATAAAAACTTCTACATCTTCCCTAAGA

165/375

TAATATTACTGAGATAGCCATTTATAGATCATTATTTAAAAAGACTTTTTCATAGTGCATTGACATACACTATCCCAAT
TGTTCCCTCATATAGAAGAGTTTAAAGTTGAAGAGAAACATAATCAATGTCCTCTAGAAAGATTCCCTCTTGTAGTAGCAT
AGAAGGGGAATAAAAAATAAGCAAGACAGAAGGTGGGGGGAGTCCAGTTGAGACATTATGATAAAAAATCCAGTATAGCA
GATAGAGTCATAACTTAGAGCAGTGGAAATAAATAGGTTGATATTATTAGGCTAGGTTTGTCCATTCTTAGCAATCAATT
AGAAAAAGGCAGGTGGATAAAGAATAAAGAGATGGAAATCTTAAGGTATGTACTCAGCCAACCTGGGTGAGTGATGGTAG
CACTTACCAGGTCCAGGGGAGGAAAGCTGAAGAGTTTGTCTAGTGAACACACAAATAGAAATGTTTCAGTAGATTATTGTCA
TCATCATCATCACCATCCTATCATCATCATTATCATATTTCCCTCAGCACTATCATTTATTAATTTGTGAGGCTTGGTA
CTCCTAGAAGCTTTGACACAGATCAGGTTCACTTAATCTTTTCAACAGACCGTGGAAAATATACCCTTTTCTCTAGATG
CAGACCTGGAAAAATGGAACCTTAGAAAAGTTATAGAATATATATGTTGTTGTTGTCCTTTTAAGCTCAGTGATCATGTGC
AGGATATGCAGGTTTGTACATAGGCAACATGTGTCTAGGGGCTTGTGTAGCGATTATTTTCATCACCAGGTATTA
AGCCTAGCATCTATTAGTTATTTTTCTTGATCCTCTCCCTCCTCCACCCTCCAGCCTCCAATAGGCCCCAGTGTTGTGC
CATTCCCCCTCTATGTGCCCATGTGTTCTCATCATTTAGCTCCCACCTCTAAGTGAGAACATGTGGTATCTGTTTTTCTG
TTTCTGTATTAATTTGCTAAGGATAATGGCCTCCAGCTCCATTCTCATGTCCCTGCATAAGACATGATCTTGTCTTTTTT
TATGGCTAATGCTAGAAATTTTATGACTCCAAAGTTTCAGGTTCTTTCAATATATCAGATTTTAGGAACTCAGAAGAATT
GAGAGAAATAGTGTGGATTGGTTGGAAGTTACTAGGAAAATATGATGAGCATCAGAAAGAACCTAAATAAGGGATGCC
AGTGGGGAAAAGCTCAAGGATGGAAGCCAGAGGTGCACCATTAAAGTGCAAGGAGGAAAAGAGGAGTCAGTGATGGGA
CCTAAGGAGGAATTCCTACTCTGTGCTTTTTCAAGCAGGATACAGATTCTTCTTTTTTTTTTTTTTTTTTTTTTTTGA
GACGGAGGTCTCCTTGGTCCAGAGGCTGGAGTGCAGTGGCGCAATCTCGGCTACTACAACCTCTGTCTCCTGGGTTT
AAGAGATTCTCTGCTCAGCTCCCGAGTAGCTGGGACTACAGGCGAGTGCCATCAGCTCCAGCTAATTTTGTATTT
TCTAGTAGAGATGGGATTTACCATGTTGGCCAGGATGGTATCAATCTCTTGACCTCGTGATCCGCCCCGCTCGGCCCTC
CCAAAGTGCTGGGATTACAGGCATGAGCCACCATGCCAGCCACAGATTCTTCTGTGTTCATTTGAAATGTGAACTC
TGAACAAAGGACAGTTTATCTTGGATAGTCTTATTCCATGATTTATATATCACTAAAAGAGCAGAGAATCTGTAGATAT
TATAAGTGGGATCCTTAATAATTAATATATGGAAGAGAAGCTTACCAGATACCAGGATTTTTCTGCATTGCCTGGAAA
AGGAGGATATCTGCAAACCTTTTGTACCCTGTGCATTATCAGATTGGACCTCAGATGGGACCTCTGCCCCACAGAATTT
CTCTTTAATGACTCATTGCTTACTGGTCTAAGAAGAAAAATAATTATAGCCTCAGGTTAGAAAAATGAAATGAATCA
TTTCACAGTCAGATTAATGCTCCATTAGTCCCCTATATATGAAAGGGAGGAGGGAGTCACCAAGTCAGGTGGAAATTC
CTTGGGATGATTGAATGTAAGGGAGAAAACTGTGATAATTGACATAGTCAAGGCAAGAACCCAGTCCGAAGCAATA
TTTTCTTTGTGTGAGGAAAGGGTACAGTATTGCTGGTCTTTTTTACATATAATATTACTTTGTATTTCTCCCAATACTT
TATTTTTTTTTTAAATGGATAAGAAATCATAACCAGTAGAGAGAGTAAAGAAACACAGGTCATTTTCTTTAATGAATA
TCATCACTCTTGAGTTATAACTCTATTATCTACAGTCTTGTAAAGTAAATTTCTCAATAAGAACACTTTTTTTA
TAGAAGTTGAAGTTCTCTTCTGGCACACATTAGAATTCCTCAGTATTCAATTTTTCAGTTTATTTCATGGTGTCAAAGG
AATTGATGTGATAAAATTTCAATAATGCAATGAGAATATTACGTTTGTGCAAAATACCATGGAGATGTTGAGAAGTAG
AGTGAAGGGACATTATGTGAAAAGTAACATCTCACTGGACTCACCAACTCTAAATCTTACTTTTTTCTTCAGAGATGAG
GTCTACTCTGTCTACTCAGGCTGGGGTGCAGTGGCATGATTATGGCTCACTGCTACTTTGAATTCAGGGCTCAAAGGA
TCCTACTGCTCAGCCTCCTGCGTAGGGAGCCATCATACTCGGCCATTTTTTTAAAAAAAATTTTCTGTAGAGACAA
GGTATCACCATGTTACCCAGACTGATCTTGAACCCCTGGCTCAAGCAGTCTCTCCACCTCAGTCTCTCAGAGTGCTGAG
ATTACAGGTGTGAGCCACCATGCTAGCTTAAATCTTGCTCTTATATATGCAATTATTAACAATAGAAAGCTGTTTTG
TATTACTAGATTACTTGGTTTTTCAAATTTCAACAACCTTTTTTGATTTTTAAGAAATTTGGTTAGAATGGAAGTATT
GGCATAAGTCACTAGTTTTTCAAACATACCCAGCAGAGTTGAAAGCGAATGTAAACGCCATGGCCTGTTGATTCAT
CATCGTATAGAGTATTTTTCTGCTTATGTACTTTTATGTTTTGGTTTAGAGACATGTATGATTTATTACACCAGTATT
TTAAAGCACATTCTCCCTCTTCATTTCTGCAATGTACTGTGTGCAACCAACTTCATAGGTAAAGTTGTAAATATTGC
TAATTTACATGGTTTCAGCCTAATAGAATCTCATGCCCTTTTAAAGCCTTGGAGAAGGAAAGCCTCTCATATTGTCTCCT
TCCAGATTCTTGGCTCAATCCAAGCTTCTGCATAGTTGGAGTGGCAAAATCCCACTCCTGCATCTGGTGAGCTGTGCAGT
TAGCAGCTCTGACACTTTTCTACGCTGTTCAAACAATTACAGCCCCAAATGTGAGTGTGGCCTTAAAAAAGGCTGATT
CCATGTGACTACCAGATTGCTTCAAGATCTGCCAGTCATCCCCCTGACTGTGTCTATCCCTTAAAAATCTGTGTCTCT
GGGTACAGAAAATTAGAAGAATGTTCTTGTATCTCTGCTTAAATTTTTCAGAAATTTTTTCCCTTTTGAACACGAACTAG
GAATTGGAATTAGACTTAATGACTTGACTCTATGTAGTATATATTTCTTTTCTCCAAACACTGTTTTGTATACATGAGG
AGGGACAAGAAATGAAGGAAGGGGAAAAGTATAGCGTTTCAGCCCCAGAAAGGTACCTTTTCAATGTAAATGCAGAGT
ATCTGGTTAGACATAGCCATTTTGCTCACAAGCACATTCAGAGATGAAGACATGCAGTCTCTAATTGTTTCTGTTGATC
TAAGAGGGTGAATAAGAGGTGGCATATGAAAAAAACCTTCCATTTTCATTGAGCGTACCCATATCTATGGCATTTCT
TACCAGTCAGTAGGAATTTTTTCTTACTGATCAGTACTACTGAATTTACCCAAAGGCAAAAATATCCCTATTGTTTCT
TTTGTCTTCTAAGCTTTGTTCTCTAGCTTCTAGGTAGATGTTAACTTTTGGTATTTAAATGTGCACACTCCCTGAGACC
AACTGCCCTCAGCAAGTTTTACTTCAATATTAATGGGCAAGATGAATATTGTTTGTGATTTTCACTGTTAGCAAAAGGGA
GGAGAAAGAACTAGAACTAAGTTCAATTGAACCATTACTATGCAGGGTCTATACAGTCATGATTATTATCTCAGATTCC
AAATCTGTTTCAACAAAAATTATGATTATCAAAATGTTAAGATAGTAAATTTTATGTGTATTTTTTACCACAATAAAAAAG
TTGGAAAAATGATTTGACTATATCCAAGTTTGCAGAGTTGGTAAGTAGCTTTTTTATTGCAAAAAACCTTGCTGATTTGT
GAAAGAACCTTCATTTCCAAATTAGGAATAATTTCTGCAAGGAAAGACTATGCTGTGTGTGTGCTGTGTGCTCTTGT
GTGTGTGTGTGTGTGTGTGTGTGTAACCTTCTGTTGTGAATCCATCAGTGGTTTTGCATTGTTTACAGGATAATGC
TCAGAATCCATAACAAGGTCAATAACTCATCTATCATTTCCTAGGCATGCTGTTATCTGATCTCTAGCCTTTCTTCT
CCCATCGTCGCCAAGTTTAGTTCTACTTGACTTCCTTCACTTCCCTCCATTGACCTAGGGAGCACCTTAAGACTGAA

166/375

AGGGAAGTCGTGGGCTTGGTGGAGTTGAGGTGGGGAATCTATGAACAGATAAATCAGATAGAAGCATTGTTTGGTAGAA
AGAAGAGCTCATGAGTGGCAGTAGAGATTGAGTTAAAGAGTGGGATGAAAAAGAATCAAAAGGAAGTAGTACGATTTGG
TGACCAATTTGTTAGAAAGGGATGAGGGGCAGTAAGTAGTCAGTGATGACCCCCGAGGTTTCTAGCTGGACCTAGAATTGT
CCAACTAGTCCAAAAATGAAAAAATTTGCCTTTAACTAAGATGAGTTTGACAAAAGATGAAGTAAATTTGAGGGTGTAG
GTAATGAAAACAGTTGGCTTTTTCTCCCTTGATGGCAAATTTAGTGTGTATGGATGTATACATTTGTGTATTTGTGT
GTTTGTCAATACCCATTGATTTTTCTTAGGTTATATTCAAATACTGAAGTTGTACTAATTAAGCAACCGAAGTGTATGC
TTTCAGCATGGTACCTTTACACAGCACCAACATCATTATATTATTTCTATTGTAGCATAACAAATCACAACAAAAT
TAGCATCTTAAACAATACACATTTGTTACTTTACAGTTTCCATGGGTGAGGAGACTGCACCTGACTTAGCTGGGTTTT
CTGTTGAGGCTCTCAAAGGCTTTAAGAAAGGTGTTGGCCAGGATTGGGGTCTCATTGAGGTTCTGGCTCCTTTTTCC
ATATCAGGTGGCTGTTGGCAGAATCAATTTCTTAACCACTGTAAATTCCTTGAAGCTTGTCTTCAAGGTGAGCAGG
AGAAAGAACTCTGACTTCTGACTTCTAGGCCATTTTTGGAGAGCTAATCACTTGCTTAGACCAGACCAACCTGAAT
AACCTTTGATTAACTTAAAGTCAACTGATTAAAGGATGCTAATTACATTTGAACAATCCTTTAACTTTGCCATATTCCAC
TGGTTAAAGAAAATTACAGATGTTGACCATTCTGGGAGGAGATAGTGTAAAGGCCTGAGCTATTGGAGATCATCTTAGA
ATTCTGCCACCACAATCGTGTCTATGTTTATGTCAGGTTATGTGTGAGTGTGTATTTATGTGTGTAGTTAATAACTT
AAAAATACATGTATCTCCAAAACAAGCGCAACTGCACATCCCATGCCTTCTTACTTGGATTAGTTTTTCTCTGA
AGTTACTCCAGGGTCTGTCTTCCATTGTTAGGTTTTCTTCTGCTGTCTGGCTTCACCTTTCTGTAGCCAAGAAAGC
ACTAAATTTGGCTCTGAAATGTACATTTAGTACAATCTCCCTGTCTTGGCAGCAGTGGTGAGGCTTTAGCAAATCGTT
TGTGATCCCAAATGAGCTTCAGCAGTTTGGAGTGAGGCCATGGCCACATGTTTGATGCCACCAGCCTGATTTTTGTAA
TGAAACATATCAATAAGGTAAGTAGTCCCTTCTTAGGCATGCATTCTTTTCCAATTTTATGTAGTGGTCAGTCATTC
TTACAGTGATACAAATAAATATTTATGCTTTTATGTCTTTTAAAGCTTTTAGCAACGTTAAAGAAAAGGAGTCTGTAAT
GAATGAAATGTCCATTGAACCTATTTTTTTCAGCTTTTGAGGATATATCGAGTGTACTTCTTAAACTGAACATGTGC
ATTTGTTACATTTATATATGTTTCCACATATCACTTTGTAAAAGAATTAGAGAGAGCTTATGAAATAGAATTTAAGTTG
ATTTGGTATGAGCAAAATATATTGTTGGAATGAAGCAAAGGAAAGAAAGCATAAGAGCCATCATAGTTAATCTGTTTA
ACTTGTTTTTAACTCTATCAAGGTTGGGCCAATGTGGCAATTTATTAATAATTTGCTCTCATTAATGCAAAAGAAGAAA
TGTTCCCTTAGGGAAAAACATGTTGTCTTGGGTACAAAATTCAGCAATGTTTTTTACCACATGAGACTTTATGGAAAAT
TCCAGATAACAGACCTTGCCCTAATGGTATGTGGGCAACAAAATCCAGAAGTATCTATCATAGCATTCTTTCTTATAACA
AATTTTATTAGAAGCCAAGGCTAGAATGTTGAAGCTGGACTCCGGGCAGGTGATTCAAATGCCATACTATTACTTTTCT
AGCATGGACAGTTCTGGTTATTAACCTCACTCTTACATAAACTTTTAGAACCAAAGGATTGGAGGGATGCTGACATTCC
TTAGATATCTTAGGTAATAATCCTGAAAATTCATTTTCTGAAATTTTGATAGCAGATAGTAAGAAAATTTCACTTT
AAAACCTCACTTTGAGGACCTGAAATGTTATATTTCCATCTTGCTGATGAGGTCAAGGACTATGTTTGAACCTCAAACA
AGCAGGTGGTGAGGTTCACTTTCACTGGTAATTACGAGAAAACGAACCAATTATGCTAGATGCAAGGCCACCTCATCTT
GCATCCGGTAAACATGCCAACAAAACACAAACAGTGTCTGTAATACCTTTCAACAGCTCCCTGTTGCTCTCATTATA
AATATGGAAATCCTTACCATGGCATTGAGGAATCTGCATGATCTGATGCATGTGTATATTGACAGCACATCTTGATCA
TTCGTGCAATCACTCTCTATTATTTGGCTGATTTTGACCTAATTCAGCAGCTTGGAACCACTACTCACTCCTGCCTT
GGAGTTTTTATGCATACTGTTTCTCTACACTGAATAATACCTCCAAACCTTACCGTCACTGCCTATTAACCCCTACT
TCTCCTGTTTCTCAGTTCAAATCTCCCTTTTTCTGATTATGTGTCTCTGATTCTCCAAATCTTGCCAGTTGGCCCTGTT
AGGGACTCTCAGAGCTTACTGTAGTTTTATTTTATCCATAGCAGCTTATGAGATTTTTTTTCAATTAATGTCTATTAGCCA
GATCGTCAGCTCCATGAAGGCAGGTTGCAGGCTTGTTTTTCTGACCACTCTATCATCAACCCAGAGCACAAATAATGAA
CATAAGTGAATTCATAAAAAATGTGCTGAAAGGATAAACTACTGTTATTTACTACATTAATTACAACTTTTGTTAGCC
CCTTACAAAAGATGCTTTCTTAGATGCTGCATTTCCATCTTACAGAGGTTGAATAATATGACTATGATAGTTTTAGAG
GAGATGGGAAATAGTTTGGTATTTCTTAAATTAATAATATGAATCTGTTAGAGCTAGAATTTTTATTTCTGAAAGATAAT
CTTGTTTAGCCAGTGTGAGAACTACATTACACAAAGAACATTTTGCTAGTATTTATTCGCAGGAGAACTAAACTTGGT
AAACTGTGCTTCTAGAAAGATTGTTTTATCAGGCACCGTTGCCCTCTTTGAGCTTTATGAACTCATGTTTTTAGGACAG
TTAGACATTACTGATGGAGTTAGAGAATACTAGAAAAGTGAACCTCAGCTAAAGAAAGTGATCTTTTTTCTCTAATGGCA
ATTGAGTTGCAAAGTTCTATTTTTATTCTAAGGGGCTCATAGAGGGTGGTCCCCAGGATTCTCTTAGGGGTCTGTGAGA
CCATACATATTTTATAATAACACCAACATGTCATTTGTAATTTTCACTGTACATTTTCTCAGCAGAGATTTCTCCAGAAG
CTATACAAATGTGATGCATATTTTATAACAGATTTGAATACGGAAGCAGACATGAGAACCCTAGATGTCTTCCATTAGG
TGGCACAATAAAAAACATTTGCTACTCTCTCACAGTTTTTTGGAAAATAGTTATTTTTTACCAGAAAATAAATTTATTAT
ATTTTTTGAATAATGAATTAGTAAATAAATATTTATAATGTCTCAGTTTTTAAGATGGCAAATATTCACATAAAACAAGA
AATCTGTGAGTCTTCAATAATTTTTAAGACTATAAGAGATTTCTGATACCCAGATATTTGAGAATCACTTCTCCGAGCC
ATTTTATTGACACAATTTTACTTGACTTTGCAACCTGACCGTTTTAGATACCTTTTCTTCCAGTCTTTTCTAAAAGAT
CAATTGATTAAATGGGTTGACTCGATGATACAAAGCACACGATCTTCAGTATCAAAGATACTCATGACCAGTAAACCCC
TCTTTAGTCTCAATTTATCCAAATTCCTTTCTGAGGCAACTGCTACTCTTGTATTTCTTAATGGAGATCTTTTATGT
GTTTACTCAAATGCTAAGACATAATATATCATATTTCTGCTTCTGTCTTATCTTCCCTAATGATATAGCAAGGAGATTGA
TTCTTAACCTCTGCATGCATAATCTGCCATAGTGCTTTTAGCAATTGCAGTATCGTCCATGATCTGGATGAGACATAATTT
CACCAGACTCCTGTTGGAGTCTGTTGGATTGTTTCCCATCCTTTGTCACTACCTACAGTGTAGTGATGACTATTCTTTT
ACTTATTTGTTTCATGTAAAGTAAATATATCTCTAGAATTAATATTTGGAGGTGGAATTCCTCAAGTCAAAGGAAGGAAAT
ACATATTTTTTAAAGGATTTTAGTAGATTGTTCTGAAAAAATTACACCAAACTTACCCTCACATGACTATTTTTGCT
TTTTCTCAGTATACTTTTTAATAGATTGCATTATAAAATTTTAATATTTTACCATTAAATAAGTGAAGCAATGTCTAA
TTGCAGTTTTAATTTTATTTTTTATTAAGGAAGTTAATCTTTTTTTTTTTAGCTGAAGTCGAAAATATGTTTCATCTCTTT

Fig. 6. [161]

167/375

TTCATTGAAGCTCATTAGTTTCCAAAAATGTGTCCTCATTTTCATACAAAGTATCTTTGAACCATTGCCAGGTCATAGAA
 GTGACTCTTGAAGATCTTCTTCTCTGGGATCAAGGGTCACATCTCGTTCTCTGGCTTCATACCTTCTCTCTACAC
 ATCTCAATTAAGTAAGCTTCTTCTTCTCTGAAATTATAATCATCTTTAGGCTCCCAGATATAGGTGACCTGTGC
 CATCTAGTCTGACTTCCAGTTTGCAAATTATCTTCAAAAAGTGGAACAGCTTTTACTTTCTACTTTATAAATTCATAC
 GTGCTCAGGAGGACTTTTATTAAGATTGGGACATATTGCTTAGTTAGTCTCTAGGGTGGAATCATAATTAATGAAAGAA
 CTCTGTCTGATGGAAGGCTTAGTCTAACAATCATCCTAAACTTCATTAGACATTGTGTAATCCCCATGGACACTGTT
 GAAGAGACACTTGATTAGGCAGATCGTGACAACCTTCAGCTTTGCCATCATACATCCTCCAGAGACTCCTCAAACTCAA
 GACAGACTTTCTACAGGAAGGAATGGCTGTTTTCTATTTCAGAATATTACTGATACCAGAGCTTTGCTGCATCTTCATGT
 ACTTTCTTTTATTTTTATTTTTATTTTTTACAGACAAAATCTTGCTCTGTTGCCAGGCTGGAGTGCACTGGCATCAT
 CATAGTTCACTGTACCTCAAACCTCTGGGCTCAAGTGATCCTCTGCCCGGCTTCCGGAGTGCTAGGATTACAGGA
 GTGAGCCACCACACCCAGTCTTCATGTACTTTCTTATGTAAATTTATTTTGTGTTGAGATTTTCTTTGTGATGGAATAAG
 CAATTCCTTCTTAACTCATTTCCTGAGACATTTTGGGAATTTGCAATATATATGAAAAGCACTTATTCTCAGTGATG
 GAAACACCATTTATTTCTTTTACTAGAATGTGATCTTCTGGTTTAAATATTTATGTCTCTGTGCCAAGGTGAAAATATTG
 TAGAAATGAAAGTATAATGAGAGAGAATCCAGATAATAAGATTTTCAATAAACAAAAAAGAAGTATGTATAGGAGTCC
 TGTCTGCTGCAAATTTAAGAATGGTTTTCTGTCAACATACAGTTGTCTTACTGAAAACCTTCTATAAAAAACAA
 GACACAAATGATTGAGAAGATAGTAGAGACTGAACTAGAACTGTTGATTTAATAAGCTTTCTTACTCATATACCTTAAT
 CCACAGTAAATTATTAGCAAATTACATTTTCATAGTATTTCAGAATTAAGAATCATAGTCAGGGCTTAAAGGAATCCA
 GTTGTTTTAAACAGTGCTGGAGGCAAAGCGTTCTAGCAGCAATCACCTGTGAGAATGACTTAGGTTGGATTGTTTGCACC
 ACACACTTTACTATGTCATGTCTTTTACATGTCTTCTGATCTCTGACTCAGTTTCTCATCAGTGGAATAGCAGA
 ACTTACATTTTAGTGGGAGGATTAAATAATGTACATGAAATCAAATATATAAGTCAGCACTCAATAAATAATAGTTTG
 TCACTATTATTACTATAGTAAATGACCACTATCTGAAATGGGATATAAAAAAGGAAAGTAAATTAATAAATATGA
 GCGTACAAAGACCTGACAATTTAGATACAATATACTCACTCTGTCTCAAATAGTGTCTTCTGAAGCTTTAGTCAGAAAT
 ATTATGGTGACATTTCTGCTAGATTTGTCTATTGAGTTGCTGGGTTTGAGGAAGAACCTAGGCTACACATTTCTCTTGGC
 TCTACAAAAGGCTGTGGCAGTGGGTCCCTGAGTAAACCACCAGAAGAAACCTAAGGGGCACCTCTGTTTTTCAGTTAAT
 CAGTTTTAGCTCAACTGGGATTTAATCCTGAAAATCTAAATTACATTTACAGACTTTAAGTTATTGTGAATATTTACAC
 TACATGGGAGAATTACCAAATATATTCTGTTACTCATACAGTTTTCGAAAAACAGGTGAGACATCTTCCAGTTAAATTC
 ATCTTCTTTTATGTTTAAATCTATTGAAGAATTCTAAACATTGTTTTGCACCAAATTGCTCCCTTAAAGTTTAAAGAGCC
 ACCTAGTTTGGGCATCAGATGTTCTCCTTTATTTCTGTAAAAATCTTGCAAATTCCTCCAGAAAAGAAATGTAGAGAA
 TACTAGGCTATTTACAGAAAAGGCTTGCTGCCCTTTCTGTATAACAAGGTAGTTATTATTCTTGGCTGAGCCTGTCCC
 AGAAAGAGTCTTAGGTGACCTGGTGTGGGAATTGCTAAATCTCAGGCTACTCACTGAGACTGTCTGCTGTCTGTCTGGG
 CACTGCAGTCCCTCCAGAGCAGGCTGTGAGCATCCTACCGTGTCTGTAGTAGGTCCACTGGGGAACCTGGTGGAGTGAC
 ATCATGTATCAGCCTCTAGCAGCAACTCCTCTCTGTAGCCCCATGTCTTCTGTGGTACAAAGGAACAGTGTCTACAG
 GGCATGTCTGTAATCGTTATCCCAAGGGCACGCTCCACAGGCATCTAAGGGTGAAAGGTACTGCGAGTCTGTTGGGTTT
 GTTATTTCCATAGAGCTACACAGGAATAACACCACCAAAAAAATACACATTCAAACTCAGAGGGCAATCTTCCCTAACT
 ATTAATTATTAGCCAACATTGAATAATTATTGTTGAGAGGGTAAAGGGCAAGTGAAATAAAAAATAGAGCTGGTTTATTT
 TTAGGAAGACACTATTTTAAATGTTGTTGATTAAATCAGACAGGTGTTTAAAAAGCATTGTTTGTAGAGTCAATTACAGAAAAT
 CTCTTTTACATGCAGGTTACAGCCAAAAGAAAATAATAGCCAACACATTTACGATTTCAATTGCAAAAATTTGTCATA
 TTTTGTGAACCTGTGTGGGTATTTGAAAATATTAGCTCCTACTAGGTCCAGTTAAAGCTTTTAAATCTATAAGGTTTCAG
 ACTACCAGCTGACCACTGCTCAGCATCCCTGGACTCCAAGGGTTTCATCTAAGACATCTAAGGAGAATGTCTACCCGC
 ACATCGCACTAATGCCCATGACTGCACTGCTTGAACCATGAGGTTATTGAACAGAAAGCAAATCCTTTTCTGAAGAGCC
 TCCAAGATGTGGATATTTAGTTAATTTAGCTCCCTGCCAGCTCAGAAGAATGATGCTGTGCTGTGTGCTGTTCCCAT
 GAATACTACACGCAGGGCACTGCTCAGTGACTCAGCCTTCCAGGGAGCCAGTCAGGGTTTTGAAGCTGCATCGTCCCTT
 TCATCCTTGAAGTCTTTTGGATTTCATCAATGGCATGGAGGGATATTTTAAAACAATGGAGATTTTTCAGGACTGGC
 AAAAGGGCTCCCTCGTCACAGTGCCAAAACCATCACAAACATAAGTTATGTTAAAAAAAATCCTAACTAAAAATATC
 TGGTACTTAGGGAACATAAAGACATCTCATGTTTGTCTATCATTTCCATCAGAGCTCAGGTCAATGGACAGAGATCAATA
 CCAAAACAAACATGCATACCTTAGAGCATAAATTCAGATAAATGCTGGAGAATTAACATGTAGATAGAAGTACCATCATG
 CCTAAAACAAAACTCAGTCCAATGGTTGTTTCAGTGAACCTGACTAGCCTTCATAGAGAAAAGTTTATTCTTTTCAAAC
 TGAAGTTAAAAAGATATTCCGTGCTTCATTTCGAAATTTTCTATTTTCATGATTTTGAAGTAGTGATTTAGAATCTTTAG
 GACTATAGAAAAATCATTTTCTTCTAAAATGTTGTCTTAGTCCATAATTAGAAAAAAAATAGTAAGAAATTAACAAAA
 CAAAAAGTTAATAGTATTATTCACATATATAAATAATGGGCCATCATGGTATCTGATTTTGATAAAAAGGAAAAATATACT
 CTGGGATTTATTTTCCAAATCTGGCACTCTATTTATGAGTACCTAGACAGACACTAGAGTCTCATGGAAATTTAGTATT
 AGAAATGCTACTTTGGAGTACATTTGATGTCAATCAAGTTAAAAAATTAAGGAAGTAGATTTTCAAATAGGTAGCATA
 AAATGTAAAAATATTGAATGTTGGAGCAAGAAGATCATCTAATGCCCCTAGCAGTTCTTAATGTTGCTTGGGTGATGGAT
 CCCTTAAGAACACGATAAGAGTTTACCTTCTTCTCCATAAGAAAATATACTGCTTTTTTCTTTTATAATTAACAATAA
 TATGAAAGTTAATCTTAGTCCGATTAATAGCCCAAGAAATAGAAATGTCAAATTCATCTCATATCATTTAGTTTGT
 AATTTTCCGTTGCCCCTTTTAAATTCAAATAACACAGAAGCTGTAAAACTGCTGTCTCATCTGACTTTTTTATTTGTCTATTAC
 CCAATTGAGCTTCTTATATTACAGATAAGGAAATTTAGGACACAGAGATATTAAGAAACTTTTCCGAGGAAAAAAATC
 TGCTAGTTATTGAGCTGGGATTCAAATTCAGGTAGCTGATTTCTAGTGTGCATGTGCTAACACAGCACATACTGTGGCT
 AACCATGCCTACACTCATGCTCAAACCTACGCTGTGATAGGTCTTATTAGCATCCCATTTTACAGACGTGGAGATTGA

169/375

CTCCCTTATATTTCTTCAATTCTTATCATTTGAGTATCTAGTTAATGAGTTCTCATTTGATGTTATAGATTTTTTTAGC
TCTTCCTCACCTGTATTCTTGGAGTAAATTTTATGAATCTTAGAAACAGAGTCTGGCTGATAAATTTATTGGTGCATC
AAACTCATTGAGAAATGTCTTCCAGTTTCATCTTCCAAATGTTACTAGTTCTAAAGGTTAGTGGTTGATAGTTTACACACA
AAAAAATCAATACCTGATTGAGAAATAACTTGCTCATCAGGGGAAATAAACCTGGAAGGTTTTAGTCATAATTTATTTATA
ATCCCTCCCTATGTGATATTGAGAGATGAAATTTGAGGTGAAAAAATTCAGTATTCTTTTTTCATATATTTTGAAAATA
TAAGAGTCTTTGATGTATTCTGGGAGCTAGCATCTTGAAAAGAGGAATAAAAAATGACTTATCTGGAGTTAGGAAGGTG
CTAGTCCATCACCATAAACAGTTAAAGAGATAAAGGTGATTATCAGAAAGTACAACAAAAGTGATAACAATAGAAAT
ATTATTCTCCATACCAAGCAAGTTACAGGTATCCCTGCTCTGGACAAATGCGTGATGTGTAAACCCAGATTGACCAAG
GGCATAAGGGAGATGTAGATCTGTAGCTTTAGCACACATGACCAAGGTGGTGCACTTGGTGATAGGCTCTCGGCTGATTG
CTGACTTTGCACACTTGGCGGGGCATTTTATGAATCTAAATTCGGGAATAAGATTAGAAGCTGGCAGATGACGAAGAGA
TTGTTTGGGCAACCAGGACTCTTGTATGTGACATAATCAATGCTGAAGTTAGTTTCATCATCCCATTCCTTGTATTTTCCA
AATCTGTGATGCTTAGGGCCTTATCTAGTGCCTTTTACCAAGTGGGTGGGTGTAGAAAAAAGGACTAAATCTCATTT
TTCTTTGAAATATAAGCTTTTGAAAGAATATTTTAAAAAGAGGACTAACATTTTAGCTTTTCATGTAAAAAGTTTGAAAA
ATGCAATTTTCAGTACTTGGAATGAGCATTTTAAGACTCCTTGTGTGACTTCCCTTGTATTTTAAATGCATTTCTAGAGAG
ATGTCTGCTTCTGCTTCCCATGATTTTACTTTCAGTTGAAAGTTCAGCCAGATCCATTATTTTCTTTCTTTTGACA
CATTATGCAAAATTAATGCAAAATTCAGTGATGAGAGGAAGAGGTCTCAGAGCATTGAGCAGATGCCGTGTGCGTAATA
GAGTAAGGCAATTACAAAATTAATGCAAGCCACTGTGACTGTGTATTTTCCCGTATTCTGAAAAAGAAATCTGTCTATGTG
CTCATCACTACGAGATTTATTTTCCATTGATGTGTGGGAGATTTATGCATTTAACTGTCTGACACATTGATGAGAGAA
ACATGCACCTACAGAAATAATTTTATAGATTAGTGAGATATTTAATTCAGCTTTCTTTTCCACTAAAATGATCCTT
TGTAATAGTCTTCTCTTCCGCTGTATTGTAAGTATGAACATCAGAAATGGCTCAGTAAGCTGGAAGAGCAAAACCATGTC
TGTGTGTAGAATTCCAATGCCAAAAGAGAAATACCACTTATCTTCCACTTCTATAAATAAGGCAATAGCAAGTCAAT
AACAAGAGCAAGGGGTGAATTCAATGATCTCTAAGATTTTTCAGCTAATAATGATATGATTTCTTATCTATTACTAG
GAAATAGTGGTATTGAAGTAGAATTATGAGCTCTACATTCAGTCTACTTTTCACATCGGATTGTCTATCTCATTTTGGGA
GGGTAATTTCTCTTTAGATTCTCTAGTCTTAAGCTGTAATATGTCTTATAGTTGTCTATTTTAGTGAACAAACAGAAA
AAAAGATTGCCTGCATCATATGTAATTTTGTTCATCCAAAGGGCAATATCGTAGAATACTTGACTCATAGTTTAAAT
GATCATTTTATTGAGTTCAAAATTAAGTCTTCTGTAGATATAATAATATGTGAATCAAAAATATGTATTTGTGTGAAG
AAATGCTCTTTCTTTTCCAGGCTTGCTTCAAAAAAGTTAGTCTCATACTGAATGGCAATAATTTCTTCTTCTGCTC
CTAAGAATACATTGAGGATATAAAATATGAGACTAGAATGCTCTTATTTCAAAAACATTCACAGTAGGCATTGGCCTG
AGCAATAATTGTGAATGTTTCATATTTAGAGAATGGGTAGATTATTAATAATGAACATGAAATTTCTACCTTCTG
TTTTTCTGTGGGATATAATCCTCTGGTCTTAAAAATTAATTTTAGTAATGGATTTCACAGTTCCCTTGGAGAGCATG
CTTGGAACATTTTGTGACATACACTCTTGAGGTTTTCTTTTCAAAATTTCTTTTCTCATCTCATTTTGTGACTTTT
TCTTAAATATTGTTATTACGTGTATCTTTGTAAATAAAGTGAAGGCTTAAGAAGTTTGACTTTGTTTTAGGATGGAAC
CTTGTTAAAGTACAAGCACACATGTGTTGACAGCAGCTAGAGGAAGCGTGATAGTGTGGAAAGAAACAGAAGTCCAAA
GACCTAGGGGTACATCAAGTTCCATTATTTAATTGTCTATCTTTGTCTTGTGCTACTGAAAGTATGGTCCACAGACCATTT
GCATCAGCATTGCCAGGGAGCTGGTTAGAAGGGAGAATCTCAGGCCCTTCTAGACTTACTGGATCAGAGCCCGCATTT
TGGCAACATTACCAGGAACTCATATACACACTCAAAATTTGCCAGGCTCTGAACCTATAATCTCCAGCATTCTGATTTT
TCCAAGTCCCTCTTTCTCATCTTTGAAACAGAGTAATTTCTACCTCACAAGTCTAGTCGAGAAATTAATAACAAACATG
TAAAGCTGCTGTGTTCCGTGCTGGCATAACATGGCTGTCCCCCATCTGCTGCCAACACACACCTTCAAGCAAGACAACCTT
GAGAGAGGCTGAGTGGGAGAGAGGGTGAATAAATGTTAATAACTCACATTAGAGTTGGCATTTTTTTTCTTTTACTTG
TCTCTATTATATAGGGTGACTGTATTAATTGTGCAATACCTTTGCTTTTTAAATAATACTACTGGGATAAAAGTGAGATT
CTAATCTCATATATTATTTCAAGATAAGATTTCAGATACAGAGTTTAAAGAACCACCTATAAAAAATCAAATCCACATAA
ATTCAGAGGAAAATATCTCAATGCTTATATAATATTGGATGTTTAGGGTGATACCTCTAAGCACAACTTCAAAGGAA
GAAATCATTAGGGGAAAATACTGACATATTTGAGTACATATATGTTTTAAATTTAATTTACTTGAAAAGGAATGAAGAT
AATTAAGGAAGTACAAAATGAAAAAATTTATATGCATAGACAAAGAGTTGATAAATTTAATAGAAAACAGGTTT
TACAAGACAATAAAAGGATAAATGTAATGATTTTCAATAGATATAAGACATTAATAGGTGGGCATGTAAAAAATGTCAA
GATAACATGAAAAAATTAGTTTTACTACTCATAAAGACATGCAAGTGAAACAAACCAAGATGCCATCTCCAGTCTATC
AGATTTCTTAAAAATGAGAAAGCGCTCATAACAGTGAAAGGAGAAAAGGATCTGCTTTTCATCTTGGTTAAGATATACA
TTGCAACAATATTTATGGGAAATTTCTTTGGCTATATCTATCATTGAAATTTATGCATACATTTTTTACCCTAATAATTA
TACTTTTGAGAAGTTATCCTAAGGAATTAATCTAAAAATGAAATGATACATGTTTCAAAATTTTCATTAAAGAAAACAC
CAACTGTACCATTAATGGGAACATTTCATAAATATGTAATTTATGTCCATATGATAGAATACTAGGCACCCATTAAATC
ATGTTTGTAAACAATATTTTATTGAATTTTTTAAATTTGAAACCAAAAAAGAGCAAGATAAACTCAGTATACATAGCATGT
CATTTTTGCAAAATGTGTATGCAAAATGTGTAACATGTATATTTTTAAGATTGGAAGCTGGTACACTAAAAGTGAATGTTA
ATTCTGGGTTATGTTTTTCCCAAATTTTTGCTGTTTCTGCCCCGCTCTTTGATTTTAAACATTGAGCATACATTTATA
GTTTTAAGACTGTTAAAGTGGCACTTAGATATAGCTTAAAAATAATTTTAAATAGCACAGGGAAATTTATTTTATTAATG
CTAGTTAAATTAGACGAAAATATAAAATTTTAAATGGCAGAAATATTTCAATTTATAACATATGCATAGGAAACTGAAAA
GAGTAGTTAGCTCTAAATATGGGGATTATGGATAAATTTTATATCTTCACTTTTTTTATTTTCAAAATTTTTTATAATTAG
CTTTAGGATTTTTATAACCAGAACAAATTACATTTAAGACTCCCTTCTAAACTTATTTGCTTATTTTCAATCTCAAAT
GTGAATTTGTATGGCCTCTATATTTCCAATCTAATTTTACAGACATTAATTTCTCTTGAATTTCAAGTGAATAATAGC
AGAGTCGAAGTTACACTTCTGTATGGCATTAAATTTCTCTCCCTCCAGAAATACAGCCACTGTTCTACAGTACAGAGGAGT
CCTTCATATCACGATTTTCATTGTGTCTAAGAGGCATGTGTTTCCACTTTGTCTATTATTTGGTCTAAAAGGATTTTTCT

170/375

[illegible]

Fig. 6.165

171/375

ATGAAGACAATGAAACAGGTGAGTTGTCAGAACACCTTCTGTCTATTACATTAACCTTTTAAAGCACTAAATTCACCTTGA
AATTACAATAAACAAGATAAGTACAAGCATTAGATAATTTGACCTATCAGATATCCCAAAGGCATAAACTATCAGCTAGA
GGGTCTTTTCTTTATGCAATTAGGTGACCAGTGA CTCTTATTTTAAAGCTTTTAAATAAAAAAATAGCTTTAGGGA
TAAAACCAGCCAGATTTTTATCGTCAAAAACATGTTACAGTTTCAGCTAAGCCTTGCTTTCTTTTGAAGAATTGCTCTT
TATAATGCTCACCAATGGATTTAGAAATATCCATTGTAATCATGAAGATCTCAATTATATGTTATGAAAATAAGAAACA
TAATGAAATACCTTGAACCTTCTGCCCCGCATAGCAGATATATTTTGTATTTATGATATTCACAGTAAAAAAGCTGTG
CTGAGAAGCTCAAAATAGTATTTGATCTTAGTGGTTTTGGAGCAGAGGAATTGGCATTGCCATGATTTTCTATAACTT
GGCGCAGGCCAATGGTTTTAGGCAGGACTTTTCAGAGCAGACTTCTGTCAAATTTGCCATATGGAGTTACTGGGCTCAGA
TTATAGAGGTTTTCTGGTTGTTTGCCTAATTTGGGAATTATCAGTGCTCTCCAGGATTTTCTCCAAAAACAAGAACA
TGTTTCAGAAGAACTGACACTTCAGGAAGAAAAGTAGTTTGATATTTGAGAGGTTTAGATGGTTTCTAATATTTCTAAA
AGGTACCATGACTCGTGAAGAATTTGACTGGTAAAAAAGAAAGGTTCTGTATCCCTGGAACACAGCTAACAGTCTGG
CATGTAGCCTTACCTGAACTGGTACCTCTCCCGTACACCTCACACTTAGCATTTCTGCACAGCCAAAGACCCTGTGCTAGT
ATTGGCCAGCCTGAAGAATGAGGTTGAATTCACCTCAGGGACTGAAATCTACTTTATAGCATTTTAAAAATATTGTAGAT
CCAACCTTGAGTTGACCTACTCCGCAGGTTCTAGGGTGATTAGGTGTGAGATACAATGGGAATGAATATCTGAAAACCC
TTTGAGAAGAGAAGGAGGAGGAGGAAGAATAAATCCAATTTTACAGGTTTTCATATTTCTGGACACTAGAAAACACTTC
CTCCTCACAGCGCCGAGTTGTATGAAAAGGCAGCTCAATTTGTCTTTCCCTTGAGCAGCCTTGTGTGCCCTGGGTATTCCT
TCCATCTCTACCCATGGAGTTTCATATTTCTGTCTCATGTTCACCCCTCTGTCAACGAAATAGGCTCTGCCATTTCTC
AAATTTTATGAGAAATTATCTGTGAGTTTAAAGGCAGAGGTTGAAAACCTCGCAGCCCTTGCTCCAATTACAGATTTTAT
TTTTAAACCCAGTGTTTTAAAAAATCGAGGGAGTTTACACAAAATTCATGTTTTCTGTTTCTCTAGAAAACAGCA
AATCTGGCAACACCCTGCTCACATTCCACCTACCAAGAATGCTGCACATTAAATGGTGGCTTTTCTTTAGGTGACTCT
AATTCAGTGGGGTCTCCATGTGACGTTTCAGCCTTTGCACCCTACTTGTCCGCTGCAGGCCAGGAGCTCTCTACTCCT
CATATGCATTACAGGACCCCATGCACATTGAAGATGTTTTCTCAGGCAGAGCAGACACCAGGCAAATATCTTCTGGTCT
TAGGAGCAAGTCTTCTGAGAATCAATGATGACAAATATCTTAAATGGTCTACTCGATGGTTCTGAAAATGTAAGAGCTA
AACTACCTGTATCAAAATCATCTTGGGGCTTATTTAAACATATATGATAAGGCCCCACCTCAAACCTAAGGAGTCAG
AATTTCTACGAAAGGCTTGGGAATAGGAACATTAACACAAGCATCCCGGTGGTTTTTATGAAACAAAGCTTGAGAAT
TATTGAATTTCTCTCCGATCTGACAGCTCTTCTCCTGGSCAGACCCAAATTAGAGGGAAC TGATGAGTTTTAGGAAATAC
TGTAATTTCAACTCATCAGTCCAGCAGTGCTGAAAATGCAGAAATTTGTCTTATCAAAGCCAATTAATGCTAACCTT
TTCAGTGTGTGTCAGTACCACCATCGGTAAGGTAAATAAACAGGCAGTTTTGTCATATAATCTAGTGATTTTTAATTTA
GTTTTTTCCCTTACTCATCTTAAAAAAGCAGGGAGTCATTGGGCTTTTGTATCTATTTTAGCTGAGTTATTATTTTAA
CCCTATCTTTAGTGAGAAATTAATAATACCCCTTCTATTTGCTTTTATTCCTAATATCTGAATGGTTTTCAGCTTGAC
GCAATTAGCATGTAGAGCATGCTCACCTACTGTAATCTCCAGATGAGTCACTCAGCTCCAGCACATAACTGCTTGG
GATCCTGTTGGCTAACCAGGCTTTGAAACCCAGGGAAGAACTGTGTGTTTTCTTCAGAAGTAATCCATAAATGAGAA
ATTACCATAAATAGGCAGTTTTATTCACCTCTAAGTGATTTTACATAAATACTGACAAGGCCGTAAATTTGTATATAGAA
TTTCAGACAATACATTAATGTTTACACATTATGGTAAATTTACTGTATTTTGTTCAGCCACGCTTGTGTGGCAAA
TCTGCTAAATTTAAGTTTGCATTGTATTACATGTGTTGCTATTTCTGAGATGTCCCAATATATTTTAGCCATCAAAC
AAATAGAACTTACCTCTCTGAGGCTCAGTATCCACACTTGTTTATCATGCAAGAGACATGCAGGTGAGAAAATAGGCA
ACTGCCATTCTATCTGTGATTGCTGTTCATGGAAGAAGTAAAAATGAGCTGGGACAATATATAGGTGGCGCCAGGGATG
GCTCCTTGAAGGAAGTGATCTCACAGCTCAGACCTGAAAGCTGAGTGGAAGTTACCAGAGGAAAAGAGAAAGGGAATGC
ATTGGTTTTCTATTGCTGGGTGAGAACTACCCTAAGCTGAGTGGCTTAAAGCACCATTCATTATCTCATGTTTTCCCT
GGGTGAGGAGTCAGGTGCGTATCAGAGTCTCAAGAGGCTGACATCAGGTGTTTGCAGATGGCATTATGTCTGGGGCTC
AGGGTCTCTTTCAAGCTCCTTCAAGTTGTTGGCAGAAATTTAGTTGCTGTGGTTTTAGGACCGAGGTTCCCACTTTCTT
GCTGATCACCAGCCTGGGGCAGCTCTCAGCCCCCTTGAGGCCACCTGCAGTTCTCTCATCTTTGGCAGATCCTCTCACA
CGTGGCCACTTACTTCAAGACCAGCAAGAGAATGTTCTCTTCAGGAAGGGCCCAACTCCTCTTATGGATGTTCTTCT
GATTGAGTCAGGCCACCCAAAATAATTGCCATTTTGGTTAACTCAAAAATCAACTGATTTGAGATCCTTAATTACAT
CAGCAAAATCCCTCCACCTTCTCCATACATAATAACCTAATCATGGGAGTGACTGTTTCATCTGTTGTTGATGAGGCTC
ACATATAAGAGAAGGAGATCATATAGGACATGCATGTAGAGGATAGAATCTTGGGGGCCATCTTAAATTTAGGCTACC
ACAAGGAAGGATTTTCCAGGCAGGAAGAACCAGATATATGAAGGAGGCCATAATGACAGGATGCAATAATTCAGTGCT
GAGGCTAAGGCTGGAATGCTGACCTGGCCAGATCATGCATGCTAGGTTTAAATGGCCTATGCATACTCTATTATGCAAT
TATTAATAACCTGTTTACAAAGAATATTTGAAATATTAATAATGGAATAATATATGCATATCTTAAAGACTAGAAGTAAATAC
AATCAGGATATGTGTTTATATAACATAGTATCAGTTTGGAAATATATATGCATATCTTAAAGACTAGAAGTAAATAC
ATCCATCTGTTAGCCATGGATATCTCTGGGTGAGAAAGTATGGATGAGTTAGAGATTCTTTGTCCCTTTTCTTAGTCT
AAAATTTGCCACAATAAATATGTTCTTATAATAATAATTAATTAATAAACCTATTTCATGGTACTTGCAAAAACAAA
TGAATTTGAGCAGTCTCTTTGAAGGAATCAAATTTTGTACTCCAGGTGTTTGGAGGTTGAAAAACAAGCTCAGGAATT
AGCTGCGCATGATCTGTACAAACAAGGGGATCAGTCAGTGGAATGAAGTCCAGCTTCAGCCAAGGTGGTGAGTATAA
CAGACCTACTCTGATATGTTTTCATCACTAAACATTGAGCAAGAAATCTAGTGTTTAAATTTAGGAGCATTAAAGCAAT
TAACCTCCCTCTACCTCAATTTTCTTATATCTAAAAATTGAGGGGAGCAAAATTCATTCTGTGCACAGGTCTCAATTG
CAAGTAGCATGCAAGCAAGTAGGCTGAACCTTGTCTGTCAATCTAGCTCCTTCTGGATGGGGTATTTAATCAGCTCT
CCTTCCCAAGCACCCAGTGGACTTGAAGCTCACAGTTAGACAGAGATGGCTAGAGGTGCAAGTGCTGTTTATCATAGG
TGACATCACCTGTGTGCTCAGAGTTATAAACATAGGCAGCTTGCTACTGCCAAATCCATTACAACCTTCAGAGGTGTT

Fig. 6. [166]

[illegible]

173/375

TAATAAAAAGAATAGACATCTGTTTGTCAAGGTACCATTTAAGGCCTTGGGGCTTTAAATGAACTGCTTTATAAATGC
ACCAACATATGTGACTGTTTGCCTACGCTTTTCATCCATGAAAATTGCCCTGTAGACAGTTGCCTTTGAGGTGAAAAGC
ATTCTATAGGCACATAATATTATGCTAGAACACCTCTAAGTGCTAATCTAACTACCTTCATGACGGAAGTTTCAGGAGA
ACAATTTAAGGTCATGGAAAAAAGTGTAAACGAGTTGGTAATCTGACATTTCTAAAACTAGATTCAAAACCGAA
GGGAAAGTAGAGAGAGGAATCAAACTAGCCTAGTAGGATGGAAGTAGGCCTCCCTCCTTGGAGGTGTGAAAATGCCTG
GAATAATTTAGGCAAGAATGCCAACTGTGAGTGATGACCTTGGTTTAGGGGCAGTTATAGCATGGTGGAAACACCCCTG
GACTGGAGATCCGGCATCCCTTATGGGGATATGAAAGAAATTTGGCAGGTCTCTTAACCTCTTTGACATTCTTTCTTC
TTTGTAGGTAAGAAGCTGGTGCTGGTTCAGTGTAATTTGAACTGTGTTCTGTCATGACTGTAGGGTTCTGCTTAGTGCC
ACGTGGAGGTGGGGATGCCTTGGGTGAAGATGAAGGAGGTGTAGTAAGCAGGTGGGGCTCTGCACTCTTTTTACTCTCC
TTCTTCCAGTATCATCAGAACAACCTCCACTTTTTTGTCTTTATACACTGAGTTATTTATAAAATCCTAGTTTTTTAAG
TGTCAAAACATGCTTGATTATGAAATGATAGCATTATTCTAGCATTCTAACTAAAGTGTGTAAATTATAAACAACATATC
TTTAATGGTCAACAAATTGTTCATCATTACTGAGCAGTGTTGTTAGTAACACCAAGTAATACAATTAATGAAATCCTTGA
AAGTAGAACCTATCAGTGAGCCATGCATACAACCTGATAAGCTGTGGATAATGTATAGAAGAATGAGTTTCAATTTGGTAAT
TATTTGTACTTTTTCAAAATATTGGTGAACCTTCATCTTTAAGGAGCAATGGTGTCTTAGTTATTCTTGCCACAACCTGCA
TGGAAACTCTCGAATCTGTTAGTATGTCCTTGGGCACAAAAACAGTATTTTTTGGAACTGCTCAAAAATTATGTAGTTT
TGTAAGACATTTAGGGAAAAATCTCATAATTTATGTTAAACACTCAGTTGTCTTGGTGTGTGATGAAAGCAAAATAACG
TGCTTAACATCCTGCTAGTTGCTGAGGGAGATTCAATTCATCATTTTAGAAAATGTTTTCTGGGCATCAGTCATATAATA
ACACTTTCCAGCACTTGGCTTCACAAAGGAACAAAACAGACACTTCTGCAAGGAGAGTCCAGTTAGGAAAAATGTCAACACCTA
ATGACAGACTGAACACCTAGACATATATGACAAGCTCTTTCTTGCAAGGAGAGTCCAGTTAGGAAAAATGTCAACACCTA
AAACAGTTAAAGGCTAAGATAGCTTCTGTGGACACTAAGTGCTACATAGTAGTTCCAGAGGAGGCAGAGAGTTAGACCT
GGCTAGACACTGGACAGGGGGTAGAATTAGACAGATAGTTCTTGGCTTGGTGCTGGTACATAGTAGTTGCTCAATAAA
TATGTGTTGAATAAATGAAAAACCAGGACTGACTGAATAGACAGTTTACACATTTACATAATAAGTGTGTAATTTAGGG
AAGTGGGGTTAGAATGAGCCTGGGTGAAGGAAGCCTTGAATGAGAGATGGAGAACTGTAAACGATAAAGGTTTGAAGT
TGGGGAAAGGTGAGGGGGAAGTGAAGTGAACATGGAGAAGCAAAAGTGTGAATATTTCCAAGATGCCTCGACGTTAT
GATAGATGAACCTCTGAGACAGAATGTAGGGGGAAGATAGAGGAAAGAGCCAAAGAGCCTCTGAGGGGTGCAAAGAAGTA
AAGAAAAACCAGGATGTATGATGAGAATTTTATTATGGAGCTATCCAGTGTGGATGTGACTTCTCTTCCCATATCGAC
ACAAAACACTTAGCAAAAACATTTCTCTTTCTCTCTCATGCTCTCTGTTCTTTCTCCCTCTATCTCTATCTCTCTTTT
GCTCTATCTCTAGATATCTATTAGACAGATGATAGATAGACAGATACATAGATAGATAGGATAGATAGATAGGATAG
ATAGATGATAGATAGATAGATAGATAGATAGATAGATAGATAGATACATCTTGGAAAGTGGTAAGACAGAAAAAGTAGTG
AGTATAGCCTCAAAATGGCTGCAAGGGCAAGGTAAGAAGCTGAGCTCAGCCTTCAATCCAATCCCTGTTTACACTCTGCC
TATTTATTTGTTTATAATATACTCTGACTCCCCATCGACATATTTACATCTTGGTAGAAGAGATTATTTTGATATCT
CTTTGTATTTATTTCTTAGCACCAAGATAATTTTAACCACTATTTTATTATTGTAAATCTATTGTTTTTACTCCAAAG
AAATACATATTTGTTGAAGAAAAATTAGAGATACAGATAAGTTAGGAAAAATAATAATATCAGAAAAACAGGGCCATCATT
TAAACATGGTTACATAAATAATAAAGTACTGTGCTAAGTATTGTAATGATGCTGATGCTTTTGTAAATGATAGTACTGA
TGGTGAAGATGGTGATGGTGATGATGACAAATGATGAACACATACCTCCACTGATTAATGTGTAAGGCACTGTTCTTA
AACCTTTGTCTAAATTAATGCATGAAGTCTTCAACACAGCCTCAATAGATGTTATTCTTCCCTCCCTCTATTTATTTTA
TTTTAGCATATTTTATAGATGAGGTATCTGAAACAGAGATAAGCAACCTGGCCTGAGTCATACAACACAAAGTGATGGA
GGTAGGAAATGTTCCAGACGGTCAAGGCTCCAGTTTTTTTGGGCACTACCAAATTATATTAATAATACAACCTCTGTAGCAG
CCTGCTTTGAGTTATGGAATAGTTTCTAGAATAAGTCACACACATAGATTTGAGGCCAGGACCATCTACTCTGAGCA
GAAGCTCTACCTAACCTTGACTATAAACTGACTCTACCAGATAATCACACTTGGCCTTTCTGTAAGTGATAAGCAACT
TGCTCTGTGGGCACCTACCCTGAGAAAGGTAGTCACCTGCTCCATGCTCTGTTTCAAGTACATTATTATTATTTAT
GAATTACTTATTAACATAAATTTATTATTATTACGTATTATCCAATTATTAAGTGATGTATATGTATGCAGGTGTGT
ATGATTATGAAATACAAGATGAAAGAACTGTAAAGAAATAGCTTTGAAAAAATAGTAATGACTGGGCCATAGCCCAGT
GATAAGGCATGTTACATATACCATTTCTTTTCATGATGGTAAACAGCCAGCAAGGTAACGTGCATCAGGGCTGTCATG
TATTCTAGTACTGTTTGTGTACTGAATAAAGGCATTTGCTGAGGGATGATAGGGCTCAAATCCAGGCTGCACTCCTCT
TGATGATCTATGAACCAAGAAGATGAGTCTACCTGGAGGGGAAAGGCTTTTCCAATATGCACAAAGTCCACAGAAGCT
AGAGTTGTCTTGGGAATGATTATCTCCATTTTGTAAATAAGGAAATTAAGATCAGAAAGATTGAGTAATTTCTCAAGA
ATATGTATCCAGCAAAATAACAAATCAAGGACTCAAACTAGGCCAATATGGCTCTCACTTCCCTTTCTCCAAAATCACTG
CTATGTCTTTCAACTAAATTGCAATTGCTCTGTTCACTGGTACAAAGCTTGTGTCACCATTAAAAATCAAGGACTATCT
GATTGTGTATTATATTTTATAGATCCTTTCTGAAAGCAGGTTTTAATGGGGAGGGAGAAAGTAGCAACTGGAAGAGAGT
TTTGAGATGGTAGATGGTAAATGTGCAAGCAAAATCCCAAAAAATCTGGGGACACAGACTTCACTGCCTTCAGAATAA
TTGAAAGGAGAACCTTCAAGTATGAAGCTTCAGCTGAAATTTCAACGTGGTTTTATTACCTAATATGCTGTTCTATTAA
TTACAAGCTATTAGTGACTATTAGCCTATGAAATGTATTTACAGTTTCAGAAATGTATTTGATTTTTCACAAAGCCTTACT
GGGGAACAATGCTCAGTCAACACTTTCTTCGCCTAAAGAGTACGATCAAAGAGCATGAAGCGTAGTAAATGTTTAGCCT
TTGAATTTGGAGTTTACAAAGGATAATTATCCACGGGTTGGTGAATTCATGTTCTCTCTACTCCACACAGCCTCTGGT
TTCATTTTACAGTTTTCGCAATCAGATGTAAATTTAAATATAATCATTTCCATTTTAAATGGTTCCCTGTACAATTAT
CTCATTTTAAATCTTTTGTCTAATGTGGTTATTCTAATGCAACTATGATCATTTATTTTATGTATGTAAGATGTCAATAC
TGTCACGCTGATGATATTATCTAATAGTATGTAGCAAGCATGTTCCCTTCCACAGTGCCTCACTCTTTCGATGGGTA
AGATGGGAGGTGGGAGTGGGGGAGCATGGCATTAGCTGTGGATAATAAAGCAAAGTAAGTACAATAGGTGTTCAATAA
AGTCATCATTTTTTGGTACTTACGATGTAGTTTTCTTGTTCCTTTGGTTCCTTTTGTCAGTGGGTGTATTTGCTTAGACAG

174/375

AGAGAAGTGGCAGAGGGAGACTGCATTTGTATTTGGTTATTTTCAGAGAAATGCAACTTGGTATTATGAGCCTTTAATTC
TGTAGGGCAGTCTCCAGATCATTTTGTATGCTGAACTTTGTCAAAAAAATATTGATTTTTTTCTTCCAATTATAAACA
TTTGCTGGTTTTCTTGTCAGTTAATAACTGACATAACATTATTTTCAGACCTTTTCACTTAGGGCTCTGTTGTGTGTTTCTC
TTGATCAAAATTATTGCCTTAGCATATCAACTGAATACACAAGAGAAAAATCAAGTTATCTATGTTTATCATATGCATT
TTTGAATACCTATATGTGATGCTTGAGCATAGTGGTTTTWATAATCCTGTAAAGCGATTTTTTCAGGAGACCAGATCTGAC
CTCCTCTCTCACACCCCTTTTCACTGCTGCAACACACCACACATACCACACACATCACCACCCTGACCGACCAATGG
AATCTGAGCCAACATAAATCTCAAACTTGTGATATTGGATAATGCCCTGGAGGAGAAACACGGCTACCGTTCAGTAAT
TCCAGAAAGAATTTCTTCTTTAAACTCAGTAAACCCAATGGCTTCTCAGAAAGTTCTTCTGAGTTTTCTTATTTGAAA
TTTGAATATTATTTGAAATTGACTTAACTGACATCACCTGTTCCCTCTGGATCTCCAGTGATTTACTGTTGACTCTT
TCAAATCCACTCATCTCAGGGCTGGGGGACTGAGTCACAGTCTGCTTTTTCTCCATTGTCTATTCCAAATTTTTCTTC
CCTCTCCTTGCTGGGGGCTGGTGCTAAGTTGACCCCATTTTTCTCCTCTGTGCTGTCACTCACTGCCTTTCCAGAATC
TTCTGCATCAGGTCACTCACTCTTCCAACTTAATTCATATGTCAACCCATTATCACCAGGAGCCACGTGGTTTTCTT
CACACAAATTGTCTTCTCTGCACCACAGATGCCAGTACACTCTGGCCCTTGCCATCTGTCTTAAAGATGCAACACCGGT
CTGCTTCCAAATCCCTAGTTTCAGACAGCCTGCTTCCAGTTGCCACATCCTGTTTGTTTCCAGTTTAACTATGTACAC
TGCCACTGCTGCTTCTACTTGTGACACCTTCACTGACCTCTCCATTTCCCCCATCCCTCCATTTCACTTACGTTCCCT
TCCGGCCCCCATCTCTGCTTCAAYGAATGAACCCGTTTTTCATCTGTTTTTCCATGTTGGGATTCTAGTCAGATTTCTT
GAAATTAAAGCTTTTTCTAGTATAAAACACTCAGCCTGTCTCTCACTTTAAAGTGAAGACATAGACACACAGAGAAG
TGAGATGATCTTTGTCCAATATTGATTAGTGGTGGAAAGTCCCTTGATAGCCAATCCATATTTCTTTCACAGTAATAGAA
AGTACCAAACCTTTAAAAATGAGATTAGAAGTTGCCTTTACATAAATGTTTAGGCTTTTGAKATCTCAGGGCTATTTTGT
AATACTCTAATTTTAGGAATCATTGTTACAATGTTTCAAATCTACTGACTTACACATATATATCCTACATATATTGTCT
AAACATATTCTGTAGAAGCAATGGGGATTCTGATTATGAAAAAAGTGGCCATTGCTGGTTTAGGCAGTGTGTAAATGT
TGCTACTGACATCCTAATGTGATTTTAATTCTTGAGTCTGGTGTCAAAAAAGCTTTCAAAAAAGAGCATTTTGATC
ACGACTCATTTTCCAATTTCTCTCCTCCATGATCCCAACATCTTCTAAGAAATCCACTCTGTACCTGAGTTTCCACAT
GGAACCTTAGGACAATGATGTTAGTGAATTAGAGGTCTGGCAGAATCAAACGAAAGTAATCCTCACCAAGTCACTAAACC
ACACTACTTTGAGTCTATGCAAGTTTCAAGAAATTTCTATTTGAGCAAAAGCCACAAATGGCCAGAGCCGACCTCAGGCTT
TGTGCTTGAACCTGCCTAATGCCATTTGATTTTTGATCCCGCACTTTTCTTGGCCAGACCAATGGTCTTTTCTAGCAGT
AAAATTTTCAAGATAGGTAGGCTACCATCACTCTTTGGGTTACCCAGTGTTTACTTAAAGTTGAAATTCAAATAGATATG
TATTTCTATATGAATGGCTGCCATTCTGCTATGCCCATGTTTCTGTTTCTCACTCATCTCTGGCTGTCTCGTAGAGCC
CTTCTGGTGTGCTGACTTATGTTGCTGAGTCAAAGGCTTTTCAAGTCAAAGCTCTTCTTTTATCTGATATGTTTTCAG
TTTGCTGTACTGCGTCAACTCTACTGGGATCATATTTCTCTTGAGACTAACTACTAGGCAACCTGTGCCTTCTTCTGC
ACTGCATTTTGAAGTGTCTTCTAGGATTTCACTTTTCAATTTAAAGGCAAGTATAGCTCAGAGAATGTGGAACAGTAAC
TAGAACAGATCCAAGAGCTGTAGAATCAAAGAAGAGTTAACTACTGTCTCTGAAACTAGAAATGTAACCAAGTCAAGC
TATGCAACCTCACTAAGCCTGTTTTCCCATATTTAAAGTGGAATGTAAATGTTTATGAGTCTACCACATATYAGATTG
GTGCAGTGATTACAGGAGACAGCGCATGTAAAACTCCTGGCATGGAGCCTGATGCATTTGAAACATTTACTACAAACTA
CCATTGTTGTTATCATTATTAATAAATAACCCATTCTTTCAAAGAATCTTGTTCTTGGCCACCAAGCTTGGAAAGTCAGTG
ATATTGTTTCATCTTATTTGCCCGGTTTTTTTTTTTTTTTTTTTTTTTGGAGAATAATTTATGACCTCTGTGGCAGCAAG
TCTGGCCTCATCTTGACCATTCTATCTGCATGTACTAACTTTTCAATTTTAAATGGCCCTGTGAGCTTTCTCCCATAG
CCAAAAGTGCTGTTTTTCTATTCTAGTGTCTTGTGTCAGGCAACAATAATTTCTAAATAACATGCCTCTTCTAAACC
AATCTCTTAAAAAATAGATTGTTTTGTTTCTGACCCCTTTCTCATTTCCATTTTCAGAACTATTTTTTCTCCTCTTTAA
GCAGGTTACAAACCCTTATATTTTAAATATGCTGAGGCTTGTAGTCAAACCATTAAGTGTCCCAAAAGAAAAGCCCTTTT
AGCACATTTACAGCTTCTTGCTATCTGTGCCCTAACTAAATTGTGCTACAGGGATAGTTTCTTAAACCATTAATAATGATA
GGTGAACACAATTTTATTTTGAAGGATTACTAAGCTATTTTAAATTTCTATAGTTAGAAAAGAAAAGCTTTTAACT
GAACTTGAACCCAATTAATAAATAACAATTCTCATGGCTCTCCGTTTTGCAATACTTTTCTTATTCATAAAAATAAGAAATGT
GCACTTTACCTTTTTTGACCCATATATTTGATGTTTTTCAATTCTCTACACGTTCTTTATCTCTCTGTGAGTGTGGAATA
TTCTGATTTGTTAATTAATACCCAAAGCAGCAGTTGGCTATTAATGAAATGTACAGAAAGGTATTTGGTAAAGGCTACA
TGAAGATGATGATGACAATAACAAAGATATCTGATTGAAAGTAATCTTTACCTGTTAATCTTCCCTTAATGTCTCCGAC
TACAATGGCAGACGTTGCTTTCTTGGATGATGACTGAAAGATTAGTTTGGAAATGAATAAATTTATTTTTCCATGGTTGA
TTCATAGATTTTTTTAGAAATTACTAATTTTGAATAAATTAACCTTCTTTTTCAGCCTTTTGAAGTTTATGTTTCTATAG
TTTAGGCTTAAAAATAATGTAGACATTAGAAAAAACTCAAGCGGTATTAATCCTTATATCCCTAATGGTAAAGAGCGA
GGCAGCTAACAAATGAGGTGCTGGAACACTAGCAAGGGAGCCTGTCTCTTCTGCTGCTTTTGTGTGCTCAATTACAGG
TGAAAAGATGCTATCTGTGAGTTTGTCTAATACTCAATAACAAAGGCTGTGAGTTCTCTTATGCACTTGTGCAATGT
GAGCAGATCCCATATGATGTTTCTACTAAGGCTTGTGCTGTAAGTGTAAACAGTGTACTTGTCTGGTAACTAAATAGGGA
CAAGCATGCAGTAACAGTGTGACACTGAGCATTTTCACTTATATGTCTTCTTACCTCAGAATTTTAAAGAAGAAACAATGC
TAAAGGAGATTTTTTTTTTAAATTAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA
CACATACATCCGGTATGTGTGACGCCAGGTTTATCCATGGCCTCTCTCGCCCTACTGCTTTTTTAAAGTAATATGGGAAAT
GCAAATAAACAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATA
AATAGTGATTTTGAAGGGTTTTTAAATGCCTTAACATAGGCACTGACAAAATGTTTGTAGGTCTTACTAATGAATTT
TTATGTTTTTTTCAATGGAATGTGCATTAGAATGAGGCCATTAGTTCTTTGTGGTTAACCATAATCTCAAGATTTCTTGT
AATGAGAGTAACTTTTCTTTCTGGGATCCCTGACAAACCGGAAGAGAGTGCTGCTGAAATGTGGGAAAAACAGCTGTGT
TATAACAGGAGCTGCCARCCCCCACACAGCTGGCTGCAGAGATAATTAATTGTGAAGAGAGTAAGGAAGTAATTCACA

[illegible]

Fig. 6.170

176/375

[illegible]

Fig. 6. 1715

177/375

GATGATAAATCCTATGGTCTTTTCAAACGCCTCTGTTGTCTCTAGGGAAATTGCCTCAAATTAGAAATCAACACATTC
TACTGCAGTTCTAATTTGCACACGCTTGCTGAAACTTTCTAATTTCTGGTTCTTTTTTACCACCTCCTCTCCCACTT
AATTTTCATAGCTACAGAGGGGAAAGATAGCTACTGTCCAAATAGTCTTGCTAAAGGACCTCATTTTCAAATTTCTTTT
CCCCCTTCAAGTCTTCATTTGACTCACGGTGTAAATCACATTAGTGAGGAAGATTTTGTACAGTCATACCTAGTGCCAAA
TATCAAGTTTTCTCCAAAAGCAAATAAAATGATGGGCAGACCACCTGCTTTCCATAAAATTGTACCAAAATCAAGG
AGGACAACCTCTACGTTATCACGTAGAAATAACATCAGCATTATAGAGTAATAGGTCTGTTTGATGGGCAATGCTGTGGT
GTGTAAATTCTGATGACAACATGTTGAAAAAATGTCTGGAAGAATGGGAGAAAAAAGTGAAAGTCTATGGAAAAGTA
GTAGATTTGGAGTCTTTTGAAGAAAACATGCAAGAAGCTGCCAGATAACTGCTAGATAAGCAGCTATTGACCATTAT
GAACTCAGTTTTTACCAGGCGTTGAGAAGGCGAGAATACTCAAATAAAACCTGCATAGATTCCACCCCTTAGGAACTTA
CAGTCTGGCAGATTCAAACAATTTCACTTCACTTTAAGTAATTGTAAATTTGCCTCCATAAAAGCATAGCCTGGATGA
AAACATTTTTCAATATTATTTACTCATTTTAATGCACTCAAATAAACTTTATACCAAGTAACTTCTTTAAAGATCTACC
AATATAAGGCACGTATAGATCAAAGTAGACAATGTCAGCCCATATAATCCCTTCTCCAGGTCCATTTTGATTGCTTGT
GTCAACATTGGAGACCACAGTAAATTACTAATGGTCTTAAAATTTCCCCCTATTTATCTCTTTCTTTTCAAATTTTC
TCCTTCACTCCTGCTACTCTATTTCTTGTGTTTTTTTTTATCTACTTTTTTTTTTGCTCTTCCCCAGGGAACTAGA
GGAAATTCTTCATCCTGATAAGAGTTTTTGGCACCAGAAAGGATATTTTACCTGTAGTCTGACCTACATGGAGTGAGG
GAGCCTGAACATGTTTCCATGAGTGTCTAGTTCAATGGGCAGAAAGATCCATCAGGAGAAAGCCTTTGTCACTGATGG
CTTTGAAATTGTTCAAATGACTTTGCAGTTCACAAACGCTGAGCTTAATCATTTGGTTTGGCTCTTCTGAGGAGCTGAGG
GAGACAAAGAAGCAAAGTTATTTTCCAGAGGTAGTGAGGCCAAGATGCTCAGAAAAGATTAAATTGAAAGATGCCAT
TGCTGAAATTTCTTTTATAATGTTCTGCCTGTGGCTTTCCAATAGTAATAGTAGTAGCAGTTGTTGTAATAATAGAGAT
AGTAGTTGTATTGATAGCAATAATAATAGCTACTATTTATTGAGCACTGACTGTGTTTCAGGCATGGGTCCATGCACCT
TACATATATTAAGTACTCATTTAAACCTCCCAACAACCTAACAAAGGTAAAGATGATTATATCCCATTTCAACAACAGAGCAA
ACTGGGACATGAGATTAAAGGAACGTGCCCAAGCTCACACAGCTAGGCGATCACCATTATACATTTCTCTCTGCAAG
AGAACAGTCTATTTTCAAACAATGCTGATAAAACAGCAATCCCATTTGCTTCTAAGGACAAACCCTGCCATGCCCTGA
GTGTTGCCATTCTTAAACTCCAGGCCAGGGCTTGCTTTGGATGCATGTGAGCTTCACTGGGCTCTCTGCTCAATGTCC
CTCCTCAGAGTGTCTCCCTAACCACTCTCTTGATCTCTCTCCACCCCTTTAATCCACTTGGGTTTTCTTTCAGCACACT
TAGGGCTACCTGACAGTGTAGCAAGGCTACAAAGCAAACACCAGATGGGGTGGCTTAAATAACAATCATTATTTTC
TCACAGTCTGAGGCTGGAAGCTTGAGATCAGTGTGCCAGCTTGGTTCACTGCTGTTATGGGTCTCTTCTTGGCCTG
CAGACACAGACACCTTTTCACTATGTCTCACATGGCCTTTCTGTGTGTGTGGGGGGGGGGGGTGTGGGTGTGTGCGC
GCGCGCGCTGCTGCATGCTGTGTAGGGAGAAAGAGAAAGCTCTTTGCCCTTTCTTTATAAGGTGAGATTAGGACCCT
ACCTTATGACCACATTTAACTTATTTACTGACTAAAAGCCCTATCTTCAGATATAGTGACATTGAGAGTTCAACATA
TGAACATATGAGCTGATAGGAATATATGAATTGATGGGAACATATCAACACTTCAACATATGAATTGGGGTGAGGGACG
CAATACAGTCCATAGCGGTGACCGAGCATATATTTAATAGGTCAATATGTGTTTACTATGTGCTTTTCCCCACTCTCC
CGGTATTAGTAATCTAAATACCAGTAAGGATTTGAGGTCTCTCTTTGTTGTATTCTTAATACCTAAGCACTGTCCAC
ACATGGTAGATGTTCAATACATATTTGTTGGATAAATAAAAAATACAGAGCTCCCTCTTCTCCCTACATGTTGAAAA
TGTGTGTGATCTAAATGAGGGAGAGGGAGAACCATCTCATCTTAATCTTCCAAACTTCTTCCCTACATGTTGAAAA
GCACATTCACGTTTCCGTCAGCTGGGAATTTAGGTGCCCTGCTTATCATCTCTGGAGCCCATCCAGGAGGGGGCAGA
AGGAGGTGGAGCAGCACTAGTGTCCAGAGTGGGGAGAGCAGATGGAGAGGAGTTTATGGGAACGATGATTTACCC
CTGCTCACTTACCCCTGTGAGAGGACACTGCCCTCCACGAATCAATGCTGGCTCTCTCCAGGAACCAGGCTTCTGCA
TCTCACTTGCCATGCTGTGGATCTAGGAACAAATTTGCAATTTGGAAATTCATTTTAAAGTGTGCATGCTGAGGTTCTGG
TGACATGCAGGGTAACTTCTCCACCCACGATATCTCTTGACTCAGGCCCTCATGTAGGAGGGGAGGAGTGTGGCAG
CAAACCTGGGTATTTCTTAGGAAGGAAATCCTTCTAAGCTTTATGGAAATCCTAGGGTGTGTCCCTACCTTTCTGAGT
GTGGAGCAGACTATCTGTGTACATAGCGGTAGTGAGGGGTGTAATATTGGAGAATGGCTTAGGTAACAGCCAAATATA
CATTTGTATATCCCCAAAAGACGACCAAGACTCACAGGGCCATGCTGCTATCATTTAGATATAATAGGCAWAGCCTTTC
ATTGATATGTAAATGTTAGTATTTTTTGGTAAGTGCCCTATTTTTATCTTCTGGATAATATAAGATCAAAGTACCATGAGG
GCAGGATCCTTCTCTCATTCATTTTTTTTTTCCCAAGAGCATAGCACAAAGTAGGAAGTACTTGTGAGTGAATGAATGAT
CCTAAATATGAAAGGATGGCATTTTATCGCCATTTTCCAGATGAGAAAAAACGAGGGAGCTTATCAGGTTTATATATA
GTGAGTGACAACTTCAGAATTAACCAAAATCTAGTGATTCCTATAACTTACAGGTTATTAAGGAGTCCACCTGAATG
TAAGTCCAACAAGACAGGTGTTTATTTTGTGTTACATACATTCGAAGTACCTAAGACAATGCCTAACATATATAAAATAC
TTCATAAACATCTTCATGTGTGAATAGAATTTTCAAAGTTCATCTCAATATATGCCTCATGTGACACTTCCAACCTTC
ACTGCCAGGTCTTTTCACTCTTTATTTGAATAGGTTCAAGTAAAGAAATTCCTCGTGCTTTAGATATGATGAGCTTTT
CCACATTTGTTGTCAGTTCTAAATCCCGAAAGTTATTTTGTATGCTTGGAACTTCAACAATATTCAAAATTTTACAA
TAAATAAATTTAGGTCTTCTTGATGAAAAATGTCGATCAGGACAGGGCTGAGGATAATCACAAGGCTTGAAATTAAG
AAGTCTCCTTAGGCTGAAATGAATTTCTAGTTGTGTAACCAAAATATGAATCTATGTATTTGTGTTCTCAGACCCTTT
TCCAGCAGGTCTTGGCTGTATTTTGTATGCATTTGTGAAATGCTTTGTTGAAATTCAGTTTTCAGCCAGGTCTGTAGCA
TTCTCCTGGCCCCCTGGTCTGATAGTTGTACAGGAACACTAGCTAACAATTCATGGCAGTGTCTCAGCTGGATTGT
TCTAACTCTTTTATATGATTAATACTCAATCCCTACAACCACCCCTTTTCACTATGCCCCTTGAGAACTRAAAACA
CTGAGGAAGAGCGAAGTTAAGTAACCTGCAGAGGTCTCAGAGCTAGGAAGTAAGACAGCCAACCTCGGAACCCAGCAGAC
TAGCTCTGGAGCCTACCCACCTACCTCCACACCGTACCTGTGGTCCATCCTCACCACCCAGGCTGCTGCCCTGAGCA
TAACTTCACCTCTTGCCTTCTAAACTATCTGCTGATTAAGTGAGTTCTGAAATGTTTTAGGGACCAATACTAAAT
CAACTATGAAATAGTTTCAGAGATTGACCTTTCTCTCTTTTGAATGAGATAAGATTTTCCCAACCGAGGTCTCCCATCA

178/375

GCTCTCCTGTTCCCTGGACTGTGGCACATAGGAGGGCCAGGGACTTGGCGCTATTATTTTCATTTCTTTTGTATACCTT
CATTTCTAGATCTCTTCTCTACCAATTATCTCTCATGTTGACAGTTTCCCCACAGATGGGATGCTATTTCCTTGAT
AATACAGCATTATTATGCTAAAATCTCTCATTTGTGTTATTAGCCAGACTCTGTGCAAAAACGTGTGTATATCTGAGAC
TCTGTGCTGTTCTTAGCCACCTTCTTGGTCCCTTCTCATGTAAATTACTAGGGCACTTCTTCAATATTATTATTATCAT
GCCCCCTTACCACCACCACAAAATCTTCCATCATAACCCATTTTTTTTTTCTCTCCTTACCACATTTTCAGCTTTGAA
CTCTTATAATCAGATCAGGAATTACATTTCTGAACAAATGCAGGCTTTGCAGCATTTGTGAAGTGCAGCTGGTCCCCAGC
AGAGAGCCCTAAGCCCCTGCCTGAAGCCAAACCCCTTTTGTGGCGAGAGGTCTGGATTTTATTGTGTGTTTTTATCTT
TGGTGAAGTGTCAACTGGAAGCAGAGATGCGAACACCAGTTATGTCTCTCCCTGCAAGGTTTCATGACCAATACTTTATA
GTTTCTGGATATGCTTCTTAGGTTTCTTCTGTTGGTGTCAATTTGCCTGCATGTGACTCACTGGCAGGTGGTGATTTCAT
CATATTCTAGACATGTGTCTTAGGAAGCTGGCCCCCTATCTGGCTGGCTGGACACATATCGAAGTTCCTTAGATCTTACC
ATTGTCACTTTTCATATCCATTGTTAAATACTATAGATAGCATGCAGGGGTGAGCCAAATTGTTCTGTAAAGGCTCAAG
CATAAATATTTTAAAGTTTTGTGGGACAGACAGTCTCTGTGCGCACTACTTGACTGATGCAGCATGCAAGCAGCCACAGA
CAATAAGTAAACAAATGGGAATGGTGTGTGCCAATAAAGCTTTATTTATAAAAACTGTCTTTTTTATAAATAAAGGA
GCCCCATCGTTTGGCGCCCCCTAGTGCCAGGAAGGAACAAGGGGAAAAATAAGGAAGAGACCCAGAGGAAAAAAGTGTCA
CCAACCATATCTCTAACTCATATTTATTACTTATTTTTCTAAGCGCAATCGCTAAATTATCTCGTCTTCTTAAGGCGT
ATGAATCTCTTACATTAACCTTAGGGACAGAATATAGAGTTTTATGTTATCTTCTGTGAGTTCTTTTTCCATTCTGTCT
GTTTCAGACTTTTCAGAGTAATTTTTAAGTATTTTCAGCTGTGCCCTTAGATACATTAAGGGACCTATAGTGCCCTCCCTGA
GGCCAAGATGATGGTTGCAATCATAAATAGGTTATTTCTGAGTTGAGACTGGTAAGAACAGATTATCCTGCCCAGACAG
TGATGTGCCAAGCACTTTGGCAACTTTGAAAAATTTGCAATTTGATTTTATAGGAGAGTTTCTTAAACAGGCCTGAGTTTT
TTTCCCATTGCTTTTGTGAATACAGTATTTTCCCCCTGCTAGACTCTTAGTCAAATGTTCTTGCCATTATAAGAAAAAAG
GAAAACTGAAAAACTTGAAAAATAATTTTATTGGCTTAGGAATTATTTTCATGTTTGTCTGCTAATGGCAAATAAATCTA
CCTTATTGAATCATACGGATTTTAAATCCCCGGGGGAAAGGTAACCAATGACAGGCATATGTGTGTGTGTGTGTGTGTG
TGTGTGTGTGTACAAGTGTATGCTTGTGAAAATTGAACAGCAAAAAGAAATTAGGTGGAGAGGAAAAACATTAAAGCTGG
TACTGGTGGGTAATCATTATATATAGTATATATACACATATGCCCTTCTCCAGTTTTATGGAGGCAGTCAGTGCCCTCAA
GACGTGTAATAAAGAGACAGCAACAATTATTGGTGGCATTTCATGTAGGAGAGGCTTGAGCCAATGTAAACTTGACTTGG
TTAGTAATCTTTGCCAAAACCTCCCTGATTGTGYTAAGGGAGTTGTGAACCATTAGGTTTGCTTAACAGAACAGCAAGT
AAGCATCCAAACAGATTGTCTTGGACCATAAGCAAATGCCAGAAAATAGCCCCCTGCATAGGAKATTAAGTACTTAG
AAACAAATGAGAAAAAATATTACAGCAAGTCTTCCAGGTATAGAAGGGATAAACAACCCCTATTGGTATCAGAATTAGG
AATATTATATGTCTCCCACTTTAAATGAAATACAGCAGCCTGACTTGGCAAAATTTGGGGAACGGTTCCCTTCTTTG
CAGCCAGGTTTCGGTGTCTGCCCCCTGGCATCCCTTCAATTGTGTATATTACTGGCAGAGACAGCTGTTTGTAGCTGTAA
TAAGATTGCAAAAATAATATCAGCTTGTGCTTCAGGTTGAAGATAAGAGATAACATTGCATTGGCTGTAGGAATGGCTTT
CTTATAAACTGGATTTAGTTTTATCTCACTTGTCTCACTTGTCTTTTTTTTATTTATTTACTTTTTTTTTTTTGTAGATG
GAGTCTCACTTTGTCACTTGGGCTGGAGTACAGTGACACGATCTTGGCTCACTGCAACGTCCGCTCCAGGTTCAAGC
CATCTCTCTGCTCAGCTCCCAAGTAGCTGGGATTACAGGCATGCGCCACCACGCTGGCTAATTTCTGTATTTTTAG
TAGAGACAGGTTTCACCATGTTGGCCAGGCTGGTCTCAAACCTCTGACCTCAGGTGATCCGTCTGCCTCGGCCTCCCA
AAGTGCTGGGATTTCAGATTACAGGTGCCATGACGCTGGCCCCACTTGATACATTTGAGGGTCTCATAAGGTCTTGAA
ATTGAGCCTGTGAATTTATAAACAGGGCTACAACCATCTGCAGATGCAACTTTTTTGGCATGCCAGAATCAGTGGCACC
TGAAGAGCATCTCCTTGAAAGCGGTAGTAGATAAAAGGAGATGCCTTTTCAAGTTTCAGACGTGGACCTCAGATTACCT
CCAAGACTAGAGTTATCAGTGACAGGATCATCCAAGAACAGACATGCAGAGGGAGGAAAGGCCATTGTAAGGCTCA
GGAGAACATAGTAGAGCTTAAAAATGAGAACAAAATGGTACTATCAGAAAAGATGGCAGTGGTTGGGACATAAGAGAGG
GTAGGTTACAGGTTTGTGGGACCAGGACTCAGTCACTTTCTCGCGCTAGGCTCAACCCCTCACGATGGGGAAAGTAAT
GTACTTCTGGGCTTAAATTTCTTACAGTCAACTGGTAGAGATATGAGGGAATTTATTGCTAAGTAGTAGGGAAAGTGT
TTTCACAAATAACATACAGGAAATTTCCATATCATACAAAGGAGGTTGTATTATCACCACGTTTTTACATATGAGAAAA
TAGAGTCTTAGAAAAGTTATGTACCTTGCCTAGGAGCATGTGCCTAGATAGTGGCAGCTCCAAGATTCAAACCTAAAC
TCCAGAGTCTGAAACTCACACAGTTTCTTCTCTGTTCTGAGGCTTCATGCAGCTGGACAGGAGGTAGCCTGAGACAAG
AGGAGGATCATTCTCGAAGGCAGAGAGGCTGGGGACATGACTGCTTTCTGGAACCTGAGCTCATGGAGAGAGGCTGAG
AGTCAGGAAAGTAGGACATGAAATCATTAAATGAGAGTGAAGACCAGCCAGGTGAGGAGTTGAAAAGAGAGATTTTGA
AATATCCATTGTAGCTAATATGGGAGAGCATTCTTTGAGAGTGATTAAAATGGCGACTGAGGACACAGCTAAAAGTGAGA
AGAATAAATCTGTGGCAGACTTGCATATTTTTGGTATGTGCATCTTTTCCGAAATCAATTGAACAGAGGTGGGAAAA
GTAGCTTGGTGGATAATGAGGTAGAGTGGAAAGTTGAAAAGACAGAGCTTAGGAGTCTTTCTGATTGGTCTAAAATTC
CCAGGGAAAATCATGTTTCTTTTATGAATATAGTCCAGGCTTAGGCTGTGCTCCACGGCACAAAGTTTTTCAGGACATT
CTGGACAAATTCACACATTTCCCTGGATGTCACTCAATTTCCCTTTGCTCTGTGCTATCACTTTTCTCTCTGCTTT
CTCCTTGAGTTACCTGTCTCCAGCTCTTCACTCCACATTCTGCAGCCTCCGTTTAGCTCTTTTATACCTTTGTCCAGATT
CTTCTAACTTATTATATCTGCTCCTCTCATGTCAACTTCCATCCCATCTGCATTTGGGAAAAGAAGCCACATGATAAGT
GAGTCCATCTGCTAAATGTATGCATCTTAGAGCATTGTGTTCAAGATCAATAAAGATACAAATATTTTGATTTTTTCAGC
TGTTGCCCAAATCCACAAGAGTACACAAATGAAAATGCACTGATTTTTAAAAAGTACAAATAGCCATTAAAGTTTGTAT
TGTTTTATTCTTTTAAATAAGCCGGAAAAATGGGAATACGTAGGAACGAGGGAGCTAGCAAAATAGGCGGGGCTTCTGCG
TTTCAGGTGGTCTGAGACTGCAGTGACCTGAGGCTGGTGGACCTGGAAGGAGCCAGGGAGAGATGGTGGATCCCAGGG
GTGGGAGCAAATGCATGGTCCAAGGTTCTGAATGGCAGAGCTAGACCAAAGGACTAACCTGCTAACCTTGACCAAGGAG
ATGGCCAGAGGTTTTCTATTCTACTGCTCCATCTTTTCATTATAAGTTCCAGTAGAAAACGAGTCATCATTTAAAT

179/375

ATCGGTGCAGCACTTAAACACATAAGGAAAAATCAATAACATTCACTTACTTACAGTACCCAGAGAAGAAATAAATTCAA
 ATACGTAAAAATGGGCATGAACCATYCTGTTCCATATCCCACCTTTAGGACTGTCAGCAACTGTATACATTGCTGAACGT
 CATTGCTCTGTACATAATGAATAATTTCTGTAACCCTGTGAAGGCCGACTGATTTTACGGAAAGACAGCTTTGTGT
 TAGGCCGCCCGCTTCCCCACGGAATCGGGTTTTCCACGCCACGTTTTGATGTTTTCTGAGAAAGTGTGCGCCATCTGCT
 GGCCGCTGAGAGGATTGACGAGCAGCCATAAGGAGCACCGTGTCTTGTAGCATGACTTAACCAGGCAATGGAATTACA
 ATTATCTTTGGGTTTTCTAAACATAATAGACATTTTCTGAGATTACGCTGACTTATGAGAAAGTCGCTTAATTGCCTTTCAA
 GCAGTATACATTTTTTATTCAATATGTGTATTATTCTTTGTAATAATAAACRATGCAATAAAGCAATCGAGGGGTTCCC
 ACATGCTCTCTAGGCAGAGATGGACCCCGGGCCCTAGATGAAAGGTTAATAGTTTGGAGTGAGCACTAACTCTGGTYCT
 CTGACTCTGAATCTAAGTCAGGAGTAGAATAGAGCTGTACAAAGAAGACTGCTTGATGGAATTGAATTTTGTCCCTTCT
 TCAATGGGGGAAAATAAAGTACAGTTTTTCAATAGATTAACTGACTAACTTGGACCTTGATGCCAAATCCAATTGA
 GCTCCGCTGCACAGTCTGGAGATGTACATAAGAGACACATGCTCAGCCTCTTAGCACATCGTTATAATCCAGGCAGGC
 AATACATATATCTTAAATTAATCTCTTTGCTGAATTGAGAAAATAGGAATTACCCAGGGGTAAATTTGGTACATAAA
 TGTACCAAATGGTATGATTTATTCTAGTACTGTCTTCTTTTCTTGATTTTCTTCTTATTGGGAAATTTGTATTTGT
 AGTTCCTTCGACAGTTTAAAAATTAACTAGAGGGTAAGATTTAAGTTTCTCACAACCTAACAAATGATTTTGTATTTTA
 TTGCCCAAAGCCCTTTATATCTCACTTTGATGGGTCTAGTCCCTTTGGCTTAATTTAGATGTGATTTTCTCTTAATAA
 TTTTGAAAATGGTGGTGTCTTATACCAACTAGCTAGATAAGGAATCACATTGACAGTATTTAATGGATAGAAGCATCTC
 AAAGATCTTTGCTTAATGAGGGCAAATCATTAGCAATGTCCAACCTCCCTATGTTAGAGGCGCCAACTAAGGCACGGTAC
 TTAATTTTAAAGCACAACCTCTCGACTTCCATAAAGTACATATATTACATTATATTTTAAATTACGGGGTAGTGACTC
 GATATGTCACTGGAATGTTTTGAATAGTGCCCCCGGGCCCCCTGCCAAAAAAGAATGCAAGAACACTGTCCTAACCA
 AGAAGGCCTGGGAGTTTTAACTAATTCAGCCTTTGAGCCTCCACTTAAATTTCTGGAAGACAGTAGTGTGGTGTCTAGC
 TGTCTTGGCTGCAAGTTGTCTTTACAGAAGAACTTGGGGTACATTTTGGTGTGAGGCCACTCTTGCAAGCAGCATTTG
 CAGGCATTAAGAGAATGCACACAGTTCAATAAGCTGGGGTTATATTCAATACTAGTCTTTGTTTAAATGCTGTAAAAATA
 CTAAAGGAATGGCCAAATCTCTCGGTATCTGGGGAAAAGGGTCTTTGAACTTTTGATGTGTGAGCAGAATAATGGA
 AACTTATCTGTTCCCATGCTTTTAAACACACACACAAACACACACACACACACACAAACGTATAGATCAAGATGTA
 ACAGGTTGGAATGGGGCTAGGCTTGGGAATTTTGTGACTCCCAGGTGATCTCAATGTACTGCTGGTTTATTAGCAGG
 CTTTGCCCAAACAAATACTCTTCTCACCTACCAGGAGAAATCAAAGAGCTCTGGGTAAACACTTGTATGTTAAACC
 AAAATGGTGGGCATTGCAGAGTAGAGGAATTAGGAGAAGAAAAATAGATATTGGGTCAAATTTGGCCTCAGGAACCAGG
 AAGTAAGAATGGCCAATCTTAAAGAGAAAGTTCTGTTGAAGAGGGAGCATTATCTGAAGTTGGAATGACTATGGAGGA
 CAATGACAGCTGTCCACAGGATGTCACTGGGCTGAGGAAAATCAGACTGGAAGCCACAAGCCCATGGGGGCTCAGGA
 GCCTGTTTTCTGAGCAGAACAGAGCTGGGTTTGGCACATGCCAGTGTTCAGTGAAATCTGCTATTTTCTGCTTCCA
 CTTTTTACAAATGAGTTATTCAACGCTACTTTGTTGACACATGGACTCAGCATTTAAAAAATGACAGTGGAGATAAGGG
 TCTAAGGTAGTGATAGGCAAATGAATGATGGGCATCCATCATCTGAAGAGCTTCTTAAATTCAGATTTCCCAACCCCA
 CCACAGACGTCTGTCTCCGTAGGTCTTGGGTAGGGCTCAGAGCAGGTGCTTCTGAAATTTTGAGGTTGTGAGGTAAGA
 ATACAGGTGGGAGCCTGCATACCCTTGTCTAAATATTTAAAGTTGTAAATCAGCCTAATGAACGTGAAGGAAGCTC
 TGGCCTACTTCTTGACAACTTAAGCCTATACAGAGACCTGGAAGATCAAGTTCAAATGCAGAACCTGAATGTTTCCGT
 TCTATCTGCTCCCTCAGTGTGTTAAAGGTCTGTCTTTTCTTGTGACAAATATGCTTTTCAATATTGCTGGAAGGCCGGAT
 TCCAATTACAGCAATTTCAAATCCCTCAGTGTGAGGGAAAGGGCCACCCGCTCTGCTCTTCTCTTCCCATCTGGCTCTGT
 CTGGAACCAAGCAAGCACCTCTGTGTGTGTGTTGGGACAAGCCAGCCAGGTGCTGCTTTTGGCCAGTACCTCCTAC
 CCTCATACTACATATGTAGCCACCCCAAGGCATAGGGTTGTGCACACTGGTGACATGTCTGCCCTCTAGAAGAAGCATG
 GGGGAAATGGGACCCCAAGGCCCTGTAGCTGATACGGCCATGAGCTCCAGGTACGGTCTAAAAGTACATTGGTT
 TGGGGCTCTGCGTGACCATATTCCAAGGATCTGCAAAGGAAGAGGCAGGACTGGAGAAGGGAAAGAGTGGGCCTTCTA
 AGGCTCCAGGGCAGGACCTCTTTTTGTCTGGTCTAAGAGGGGTATTGAACCCAAGTGGCTTAGATGCTGAATCCCTGG
 GCTTAGAACCCAATGCCCTGGAGCATTTGATCTCACAGTGTGGCCAGAAAGGGGCTCGTTGGTTGCTACTAGGTCAATTA
 TCACTCCAGGGCACCTGGGCAGTCAATGAACTGAGCTCAGAAAAGTCTGCCTTTATGATGTCCCTTCCACTTCCAT
 AACTTTCTCCATAAAATAAAACCAAGAAAAATAATTTTCTCTTGATYTCAAATCGTATTTAAAGGAAAAATAGAAATTT
 TATTTTTAAAGAAATTGCATGTTTTCATTTGTCTATATATTGTTTTGAAATATGTACACGTTGTGTAATGGCTAAATTTGA
 GCTAATTTAAATGTATAACCTCACATGCTTATCATTTTTTGTGGTGAACAACTTAAATCCACTCTTTAACAATTTTCA
 AAAATATTTGAAAAATATAGTTATTAAGTGTAGTCTGTAACTATTTTCTTATTAATTATAGGGAAGTAAATTTTAA
 TAGTCATCTTTCTCATGCTTTTCTTGACTTTTAGATTCAAGAAATAATAAACTTGAATAAAGAGAGTAATTTTACAGT
 AATGCAATATTTCTGTAAATTTTACACCTTGTGACTGTCAATCAGCTGAGAACTTTACACCTCATTAAAAATCCATT
 AGAACAATGGCTGTTCCATTAGCCCTTCAGTTTATGCTTAAACACTACTTGTCTAAARCAACATTGTTTTTGGCAGG
 CTGCTCCTTTTGATAAGTGGGGACTTGTCTGTTGATTAACTGCTTTCCAGGTCTCCAGAAAAAGGCTCAGGGTATGTCTA
 GGGACATCAGTGACAACAGTGAGGTAGAGCAAGTCAATACTGTGCCACCTCTGCGCTAGCCAGAGAACCTCTGCTCCAA
 GGTGAGTTGGTTCCCCCTTTTCAATTAAGGTCTCAGGCCCCAGTAAATCCAGATATGGCTTTGGAGAGGAACGCTGTCT
 GAGTGAAGCTCCCTCAGTTTTCATAACCAGCTTAGAGCTTCTCAGCTCTGACCTGCCTGTTAGCATGGCTGGGGAGCCCA
 GTGGTTTTATTGAACTGGCTAATAACAAAGATTCTGAGATAACGAAACAGAAACAGGTTAGGTTTTGATGAAAAGGAAGG
 AGATAAGGAGGATAAGAGGGGTAGTAGGGAGGAATAGTGGGAGAGGGGCAAAGAAGCATTAATCAAGATTTGGAGAAT
 GGCTGGAAACAGTGGCAGAGACTCAATAGGAGAGTGACCCTGACAGACGGGGAGGTGGCAAAGTGCTTGCAGGCACAG
 GCCACCCAACAGTTATTTTCRGGGACTGTTCACAATCTCATCTACTTCACAGTTTTGCCTTGTCTTAACCTCAGGTCTTAT
 TAGAGCCAGAATAAATTGCCTTGATCGTCAGAACTGACCATTCAATCCTGTGGTCTTCTTTGAGATTTTTAGAATCC

180/375

CAAGGACTAAATATCCCTATCCACTTGCCTTTGTTCACTGTATTGGATGATGTGCCATTGCCTGTCTCCAGCATTCACT
GAGAGCAGTACCCCAACATCCAACACATCTTTAAATGCCAAAGGGAAGTGAAAATGTCTGACTTCTTAAACTCTAACA
TAGCATTATCCTATTTCTTATATTTTTTGAACCTTGCATCAAAACATACATAAATGCAGGTGCACAAATTTGTAAGTGTA
AAAGTCAATGAATTTTCACTAAGTGAACACACTTTGGCTCACCAGAAAGCTAAAAGAAAGGGTGAAGTAGAAGGGGACTTTG
TAGATTACACTTCTGACACCATCATTATTTAAGAAAGAACTGTTTCTAGGTATATTTTAGGACCTTTTATCTGGTGA
TATCTATCTACTAACTTTAGGGGTGGGGTGAATGATTCTTTTTACAAGATTAGTGAAGCTAGAAACAAGTACTGTTT
AATTCATTAAATGTAACCTACTTTCAAGTAGCTTCATGTGACTGAAATCAATCTGTTTTATTTTCCAAACAGTGGAAT
ACACACAGGGTCAATTACATACATTTTGAAAGTCTTCTGTTTCAAATGTATTGTAGATTAAAGAAACAGAATGTGGCAGGG
CACGGTGGCTCATGCCTGTAATCTCAGCACTTTGGGAGACCGAGGCGGGTGGATCACTTGAGGTGAGGAATTTGAGATC
AGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCAGGCATGGTGGTGTGCGCCTGTAGT
CCCAGCTACTTGGGAAGCTGAGGTGGGAGAATCGCTGAACCTGGGAGGCAGAGGTGTCAGTGAGCTGAGATCATGTCA
TTGCACTCCAGCCTGGGTGACAGAGCGAGATTTTGTCTCAAAAGAAAAACAAAAAATAGAAAAAGAAACAAACGCTATT
GGCACACCCAGAATAATCACTATTGGAATCTGATACCAAAAAACAGGGGGGATTTCTCGTTTTTAAGTTTTATGAAAT
GAAGTAATATTCTGTATACTCTTCCGAGTTTAGCTTCTTTGAGTAGGTTTTGTGAGATTTATCCAAGTGTGGAATGGAGT
TATAATTTATTCAATTTTGGTTTTGGGTGATTGATTCTTTTAAAAATTAAGGTAAACATTAAAAAGTTAGGGTTTTAACCCAC
TACTGGGTATTACCCAAAGGAAAGAAAGTCTTACGAGAAAGACCACATGCACAGGCCGTGTTCAATTCACAGTTGC
AAAAATAGGCAACCAACTTGTGCCCCATCGACCAACGAGTGGATAAAGAAAATGTGGTATATATGCCCTATGGATTAC
TACTCAGTCATAAAAGAAACCAAAATAATGTCTCTGGCAGCAACTTGGCTGGAAGTGGAGGCCATTTATCTAAGAGAC
GTAAGTCAAGGAATGGAACCAAAATATCATGTTTTCACTTACAAGTGGGAGCTAAGCGCTGAGGATACAAAGGCATAAG
AATGAATAATGGACTTTGGGGATGGGGGAGAGATTGGGAGAAGTTGAGAAATAAAAGACTACATATTGGGTACAGTGTA
CACTGCTCCGGTGATGGATGCACCAAAATATCAGAAATCACCCTAATGAATGTGTCCAAGTAAACAAAACCCACTGTA
CCCCAAAACTATAGAAATAGAAAATGAATAAATAAAAGTTAGGGATTAAAAAGAAAGTGGGACATGGTCAATCCAGAA
GTCTAAATATTATAAGCTATATATAAAATACAAGTTTGTAACTATTTTTTGTAGTACCTGCAATCAGCAAGTTTGCATT
AATATTACTGTTTACTCCCTCACTTTTTTAAACAACCTAATTTTTCTATTTCTATTTTAAAGACCTTACCTAAGATTGCTG
TCCTGTGGAATGGTTTCTAGCCACGTGACCTTGTCTGTGTTGAAGCATGAGTGAATACATACTACCCTACTTTAGT
GAATGTTGATGATAAAATGGCCAATTTCAATGTATTTGTTTTATTTTCAAGAAAACCTTAGAGCACTCGTTCTCAAACCTT
AGGATGCATCAGAATTACCTGGAGTGCCAGAAATCCCTGAAGTGGTTGTAAGAACTCATTGCTGGGGCCAGGTGCGGTG
GCTCACACCTGTAATCCCAGCACTTTCGGAGGCCAAGGCAGGCGGATCACTTGAGGTGAGGAATTCGAGACAGCCCTGG
CCACCATGGTGAAACCCCTTCTCTACTAAAAATACAAAGATTAGCTGTGCGTGATGGCGGGCACCTGTAAATCCCAGCCA
CTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCGGGGRGCGGAGGTTGTCAGTGAGCCAAAGATGGCGCCACTGCACTC
CAGCCTGGGTGGCAGAGACAAATTGAAAAAAGAGGAGTTTCTAGGCCCATCCCCAGAAATTTTTGATTT
TGTAGGTCTGCGGTGGGATCCAATTATGTACCGTCTAATGAGCTCCCAGGTGATAGTGACGCTGCAGACCTGGCTCCAC
ATTCTGAGAACCACTGCCTTAGAGCCTGCACATCAAGTCAAGTTCATATTTCTGTGCGGTACTCCCTGGTGAGGATTC
CTCTGGTCATTATGCATTTACGTTTTTAAACTCCTTGGAAATCAACCAGGTAGAGATTGTACTCTTGTGTGCTATTTA
CCATCCTAAATCATTAGCATCTATTATCTTCTCTGCCCTACACCACAACCTCTGCTTGTAAACCATTTGGAGCGTGT
TCTATGTTCTTGTCTTTGTTTACATATTGGTGGCCCCAATTTATCAGCTTATTAAGACATCAGGCCACTATTTGTC
TATATCCCTGCACTGCCCTAGCAGGGAGCACTGCAGGGACTATTGAATTCATGCACCTGTATTCTCTGCTGGCCCATTTGAT
TTCATCCTTATAGCCCTGCTTCTCACCTGCATGTGTTTTTTTCACAATTTACATACTGATAAAATGAATTTCTTGCTTC
TTGCTCATGTAAGAATATGGAGGCTGGGCACAGTGGCTCACACCTGTGATCCCAACACTTTGGGAGGCCGAGGCAGGCA
GATCATGAGGTGAGGAGATCGAGACCATCTGGCTAACATGGTGAACCCCTCTCTACTAAAAATACAAAAATTAGCT
GAGCGTGGTGGTTTGCACCTGTAATCCCAGCTATTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGTAGAG
GTTGCAGTGAGCTGAGATCACGCCACTGCATTCCAGCTTTGGGGGGCCCCAAAACCCAGGAGTGAGACTCTGTCTCAAAA
AAAAAAAAAAAAAAAAAGAATATGGAAGTTATAAAAAATAATCTGTGATCATATAATGACTGTTTTCCCAAAAAGGGCAT
TACTTTCTGCTTCAAAGTATGTATTTCTTAACATAAGTGTGTTGGGATATGGCTGCGTGTGGGCATCACCTAGAGAA
CTTAWAAAAAAAAAATGAAAACAAAAACAAAAACAAAAAAGTATCTTATGTCCTCCAGAGGTTCTCTTCTAATTG
ATGTGGGCTGTGATCTGGGCATAGAGATTGCCAAAATTACCCGGGTGATTCTAACACATAAAAAATGTTTTAGAGTTTCT
TAAGTACTTTTTTTCTGATGAGTTTCAAGAGGGCCACTTTTTTTTTCTGTGAAGATTATTTTCAAGAAACACCTAGCCCT
TCTTTATTTGTATCTCTGTAGATGTTTTCTTCTGAGTTTTCTCTGTGAACAAGAAAAATATAATGAAGTGTCAATTT
GCACGTTGCACAAAGCATGAACCTTTATTTGGAGTCTTAGATAAACTTTGTTCTGATCTAGAAATGAAAAATAATGAAGTCT
TGCTGAGTTCTGCATTTMCTGTCTGAAGTTAGCTTTACCATAGGATCTGGTGGGTAAGTGTGTTGTTGTTCTTGTCAAT
AATTATTGGAACAGAGTTGTTTGGAGTAGATGATTGTTGGAACAAATCGTCTGATTTTGGGGACATTTTCCATTA
TAAAATAATTATACATAAAAAACAGAAGTATTGCTTAAATACTAAGATTTGTAACAATGCCATGTCAATCTGGTTGTAAT
GACTCTGTGCTATTCCACTGGTTTGGAAATAAAACAGATTGATTTTCAATCATATGAAGATACTTGAATAAGGTTAC
ATTTAATCAATTAGAACTAGTTGTTTTCTAAGTCTCACTAATCTGTAAAAAGAAATTAATTCACCCCACTCCTAAAGTT
AGTAGATAGATAGATATCACCAGATAAGTTTCTAAATATACCTAGGAAATAGCTCTTTCTCAATAATGATGGTGTCA
GTAAGTCTAATGTAAGTCCATTTTATTTTACCCTTTCTTTAGGTTCTGCCCTTGTATCTTAGAATAATGAAATATGAAG
TGAAATTTGGTGTGATGGTTTACCTGTAGCCATTTTATAATTTAGATTCAATGGGTTTACATTACTTACTGAAACTACTG
GGGAAACATTAACAACACAATAGGATTCTAGATTGATAAACTTCAACACTCAAGCTATGACAGTTGTTCTCAGTCTCG
TCTTTGATTCAATGTAAAAATTTGGACAAGTTAATTAGCTTTCTTTTGTGCGTGTATAGGGGCAGGATAAACTTGAGA
ATTCCACAATTATTCAACCCAGATCAAGATATTTGTCTCAGGAAATCAACAATATTAAGAAAAATGGCTTTTGAAA

181/375

AAAAATTAAAAAATGTTTAGCACCTTCAAATATCAGATTACATCCTCATCATCCTCACTTAGAGATTTTAAAACTAA
TAGCARTTTTGTATGGCACATTTGCATTTACAATGCATTTTTGTACACATTCTATTTTTCCCTAAACCCAGGGAGACTG
GAAGAGCAACAATTTACATATTTGCGTATTTTTAGAAAGTGAGTCTTAGAAAGGTTAAGTGACTAACCTAGGCTCAAAC
AGCCAGAAGTGTGTGGAACAAAGGCACCACACAGCTTTGCTGACTGTGAGCTCACTCTTTCTACTCCTCCAGCTATGCC
AGCTATACAATAGCAACTTGTGAGAGGTGTAGGTGTGAGGGATAGTAGGGGGGTAGGGGTGGGGAGGGGAAGAGGAAG
CAAAGTCTCATACTGATTGTATTTTTATCACTTTTCTAAAGGATTTTATGTTTTACAGCCTATTTGTCAATTGGTGGAA
ATATCTCTACACTGGTGTCTATAAACAGCAAAACATGCACCTTGAGACTCCCTGCAAGCCCATCTAAGTTTAAAGGTAAT
TGAGAATAGCAGCACTTGATACACATATCTTCATTTACTATATAGTGTGATCAATTATTTTCCCTGATACTAAGGGAAA
ATTAAACATCTTTTCATTGGTTGTTCATTTCTTTACGGTGTTTTTAATGCACCTTTGCGAGCTTTTGTAGTTCTCAAA
ACTGGCCACTAGATGGTAGTGTTTAGTTAGTATTGTGCGACATGTTCCATTGTGGGAACCTTTGATTCTAATAGGAAACA
TTTCATATATAATACTGCACTGAACTGTTTCCCCAGTGGCTGAGGCACACGATAAAAACTCTGTGGCTTGAGCCTTCT
TTTTCTTTTTTAATGACTAGACCTCCCTTCATTCAACACAGACCTTTCTTCCACATACTACTTATTAGCAATTCATTT
TTCTCCCATATAAGTCTTTTTTAAACACCCACAGTGAGGGAGTGTAAAAGTCTGCCTTTCTGTAGAATTTTGCTCTA
AACTTCTGAGAGGTAAAGCAGATCTGGTGCCAAGATGATGTGTTCTAGGGAAGTACAAGGACAATAGACTTAAAGACCT
GTGCTGCCAGCTTGTGAATAATTGAAGATTTGTATCTCGAAGTAAATTTTCAAGTACCCCTGTACTTCTTGGGTATCT
AAACCAAATAAGACAGAAGTTGTAGTTGCCTGGTATAGATACCACATTGCCAAAATTTTACAGTATTTTGACAAATCCA
ATAGATGTCTTCTCTGCTTTGTTTAAAGCCTTCTAATTTCCCCAGCAAGACAAAGCAAAATTAATTCACACAG
CCTGTTTGCATGATATGGTCCGATGGTTTACTATGCTATGTTTGTCTATTAGTCACCCAAGCAGAAATCTAAAAGTCA
TTATAACCATTTCTGCCCCCATGACTGCTGATTTCTCCAAACCATAAATCTCCTTTACTAATTCACCTGAATAAC
CAAACCTGCATTTTTCAGTTTCTCATTTCTTTACACACCCAATAAAAAATGAGATGCCATCTGTTATTTTATTCAATTAAGTC
AAGTYCTGTTTCTCATGTTCTGCGGGAATTTCTTCCCATGTGGTTTTACTGTTTGTTCACCTTTCTTCAATTTCCCTCAT
CATTACACATAAGCATTTTATAAAATACCTTCTCATAAAATCCACTCCAGTCATTTCTCTGCAGTTAACTCCAAGATCTCC
AAGATCAAAACAGACCCCCAAAGTTGTCAATGAACTGTTCACTTGCACAGTGCAGGGGCTGGGGGTGTGGTTACTTGGG
TGTGTGAATATGAACCTTTGCTTGTCTGAGGACAAACAGGAAGCCTTGTCTGCTGCTATCATATTAACTTTAGTTA
AGATTTTTATTGTTTATGAGATAGGGAATTTTTTCCCTGGGGGTCAACTGGGGTCACCTATTTTCTGAGGGCTAAAT
AAAATTGGCTGCAATCCCATCGTACAGATTGTGAAAAGTCTGCTTCTCTCAAAGCTTTTATGAATCCTTGATCAC
ACCAGGCCACACATCTCTGCTTCAGCCAAATTGGTTGCGTTTAGGAGTCTCTCACAGTAGCTGTATCATCTCTTTTT
TCCATACCACAGAGGCTCAAGGTAGAAGTGAAGCCCTTCTTACTTTTCCCAACCACAGCCTTCCCTCTGCCCCAACA
AAACAAAACCTTGTTCACACATGGGATTTCTGCAATTGTACCACTTTACTGATGGTTTGAAGAAATGGAAGCAATGTTT
ACCATAATGTGAGAAAGTGAAGTGTGTTTACTTTTCAATTTCTTAAAAAGTCAGTTACCCAGTGATTTCTATATGGAAGG
TGTTAGCCTTTTGTCTAGGTTTGTCTGGGTTTTTTCTTTTCAATTCCTACCCCTTCCGTACCTCTCTACTTCAAAAATTGCT
TATAGGAACTCCAGATTTTCTTACTTAATGGCATTTAGTGCTTTACGTCTCTCTGCTCCATCCACCTTTTAACTCCC
AGAACTACGCAAGTGCTCAGCAGAACAAAATGGGCTTTTATGTAATATTACCACAACCTTGATAGAAGATATTTTTGGTT
ATAAATAGCTTTTAAAAAAATTTTTTGGTGATTACATGTGGGTACGATGACTAAATTTGAATTTTGTCTCTTCTGCTCAT
ACACACAAACACACACACACACACACACACACACACACACACAGGCATTTATATATAGAGAGAGAGATG
GAGACTTGTCTGTCTATCCAGCTGGAGTGTAGTGGTGAATACAGCTCACTGCAGCCTCAACCTCCAGGTGCAAGT
GATCCTCCTGCTTCAGCCTCCCATGTAGCTGGGATTACAGGTGCGGGCCACCACACCTGGCTATTTTTTATTATTTTTT
GTAGATGCGGAATCTCCTATGTTGCCAGGCTAGTAACTCCTAGGTGTAAGTGATCCTCCAGACTCGGACTCCCAAAG
TGCTGGGATTACAAGTCAAGCCCCCATAACCCACAGCCTTCTGCTCCTATTTGACCTAGAAATTCATATAGTAGCCAT
AGCATTCATTCATTCACAAATAAATTATTGAACACCTACTTGCAAAAAGGAATTCAGTTCCATTTCTGTTGGGGTGATA
ATCTAGTAAATAATAATAATAATAATGAAAAGTGTCCATGCACCTTCTTAGGCTCCAATAATCCCTATGAAGAGAGGGT
ATGCTTAAACACAGATGCTTATTTTCTCACGGTTGTGGAGGCTGGCAGTGTGAGATCGGGGTGCTGCATAGTGGAGT
TCTAGTGAGGGCTGGCTTCCCTATGCTTCAACCAAGTTTATGTGTTATTAATATCAGCAGCCCTCTATCTCTGGAT
GTCTCTGGTGCTTAGAAGACATATCTCTACAGTTAAAGAGTGATCCTCAAGAACGACAGGGTAAATATATTTTTATA
TTGCTAAATGCCCCCATTTGAAGGGCTATATACCATTTTATGTAGCAAGGAGCACTTAATGGCTCCAGCAGAACAAAAT
AACTCTACAGAAAATTTTTATTTGCCCAAAGCATCTAACGAGCTGGTCCCTTCCATGCATGTGGTGGCACTCTTGTGAAC
TGCTTCTCTGAGATCCTCTTAGTGCAAAGCCAAACAAATTCAGTACATTTCCCTTCACTTGCCTTTTGGCATGTCCATGAC
AATATTTCCAGCTGATCTAATCTCTAGAAAATCTATTTCCCAAGCAACAGGCTCTCTATTTTCTGCTTAAAGAGTGT
TTATTTTTGCTTTTTTTCAGCAGCTTCACAACTTCTGACTTGGTTGACTTTTTTTTTTTTTTTTTTTAGAGAGAATGTCT
CTCCTCCATCTGCGAAGTGCTGCATTTTAGGTTTGGTCTGACAAATTTGATGCAACGGCTCAGGTATATATGACAAGGAA
ATGGAATTTCTATCCTCGAAATCAATCTGAACAATAAAAGCTGAGAGGATAAGTTTATTCAAAGGTGATTTGGTATTG
CGACAGGCTGCTCCAAATCAGAACTCAGCAACCTGATTTTGAAGAAATTTCCAAGTTTATGAAAGAAATCACTTTGTACA
TAAGGGCTTTCTACTTGTTTGGGTTTGGAGCATAACTAGATAGCTTAGTGGGATATCCATATTTCTGCATTTGATGATCA
CATTTGGCATCTAAATATTATGCTGTTTTCAAATGAAAGAAATACTGCTGAATAAGAGAGCTAGAATGAATTTACATACA
AAGAAAATTTAAATAAGTGTCTATCTAAGAAGATGAAAAGCAAAACAGTACATATGTTTCTTAACTTTTGGGGGCTTGC
CTTTAATTTTTTAAATAAGGCAATTTATCTGATTGTAATTTATAATAGGAGCTAAAATCCAGTTAAATAGTCACTGTGT
GTGAAACCCCTGTGCTGAGCACCCAGGGTATGGCTTCCAAGAGGACACACAACTCTTTTTTGGAGAAAGCTGAAGACA
GTGGGGGCGAGTGACTGAAGGTACGGAGTTGGTAAAAGGCAGAGCCAAGCTCAAACCCACACAGCCACATACCTGCAAC
TGTGTTGTTAGCACTGCCTCCAGTTACCAAAGCCTTGTTTATTTTCCAGTCCTAACCTGCTTAAATGTGCATGA
AGAGTAATTTTCAATTTTTTTTCTTTTCTAGACTGTAAATTTGTATAATTTGGATTTCTACAGGCTTTTGTGTTTCTGGTG

[illegible]

183/375

GGTGTGCTTGGCCTCTCCATCATTTACCCTGCTTTTATGAGGGTTAGCAGCACAATGTCTTCATTCTAAAAACACAGAAT
CATGAGGTTTAAAGAAAGCATGCAATGCCATCAGCTGAGAAGAACCAGAATTCACAGTGCAGGTTCTCTAAAGTGCTTTT
GTGTTGCTCTCAGCGCCGTGAACCTCCACCATTATATTATAGCTTTTTAGCCTTTGGCTAAGATCAAGTAGAGTGTTT
GTTCTCCTGGCTTTTAATAAGTAATGTGTTCTCCATCCAAGGACAACATATTTAGGCTGTACATGCATTACGAAGTATT
AAGCTCCTGTAACAGTAAATTTCTCAACAGGAGATTTATGTGAATTTCTCTGGATGTTATTCTGTTGACATTAGGAACA
ATTAGGAATATAAAATGCCATGGCAGATTTTTCTGTGATGCTGGACGTACTGTCAGGACTCTGAGTCTGTGTACTCGGA
AGTCTTCTCAGACAGGGACAAGGCGCATTTCTTTCTTAGGAAGAGAATTAACAGTGCACCTCCACCCTCCCTGTGCTC
ACCACATGGGCACACATCCCAGGGCGAGGGTGGAGTGAGCTCAGAAGAACCACGCTGAGCACAATGAAAGCAAAATTA
TTATCAGAGAAAGAAACAGATTGCAGCAACCTGGGTTTAACAGGACACATAGTAGTAGACAGGAAGTTTTTCGTGATCT
ATAACACATTTTTCATATTAGGGTCATGTTAATTTACAATGAATTGCATATTAGGCTCAATTAGAGAAAACATAAAGAA
GGAAGACGGGATGACAGAAAGCATTGAAGAGGAGGAAGCAGAATGGAGGCAGAGGGTGAATCAAAAATAAGGACAAAG
AGAGGAAGGGGAAAGAGAAAGAAAATGAGAAGTAACGTCAGCAGCTCCGTAGGTTCTGAGGTGAGTTAGCTGGTCGTAG
GTCAACAGCTTTAGTCACACATCCTGTTATTCACCTTTGGGCATCAGAGCACATTTTCTACTACCTTTGAAATTTCCATA
CAGTCTACAGCGATTTGTAGCAATCTTTCTTTACC GGGAATTTGCTTATCTGCTTTTCTTTTCAATCTTTGAGGTCAA
CTTATTAAAGGCTTTAGTTTTACATGAAGCCCCGAAATATTTTGAAGGTAAGAAAAAATGTGCCCTTTGGTCTTAAATAT
TTCCACTTAAATCTTGATTCTGGGCTACTTTAATAATTTCCAAAATAAGAGTGAGTGGCTTCTTTTTCATTAACCTGAAA
TACAACATTTAAAAACACTCATGTAATTTATTTGCTGTGTTGAGTTGTTGAAAGTAGACAAAGTTTGATTTGACAGAG
CTGTGTTTTAACCTGGGCTCTACATGTCATAAATCTGTCCTCCCTGTTAAGCTCCTGTTTCTCGTCTACAGATAGAGG
TACTCCAGTAGCTCTCCAGGCTCTGTGTGCTCTGTCTGTCACAGTTTGGCATAAAGTAGACAGGAATGGTGTGAGTTCCTC
CCTCCCCAACTCTCTCAATGACACTCCACCAAGTGCAGAAACGTACAGAAAGAACTCTTCTGCTTTTCAACTTCC
ATTGATCAGACTGAAAGAAATATCACATTAGCTTTATAAGGCTCAAAATTTATCTTCAGTGCTATAGCTCTGTGTACTCTA
AAATCAGAGCAACATAACTTTTGGTTCTGGATGAAATCGAATCAGGACCTGACTCTACTCCTAGAAGAACGCTGACCCCA
AACTCCTGTTTTCGCAACCCCTGAAGGAGCAAGTAAAGATGCCAGCCATTAAATATGAAGACCTTCAGAGACCTAGAAC
TAATGGAACATAAATCAAGGATTTCTATTTTATCTTAGATTAAATGCCATTTATATGCATTACAGGGCATAGTTTTCACT
CCCATGAGGAATAGATTTCATACCTGTATAAAGCTGGGAATATAATGACTAATTAAATATACTGTATGACTTCAATATAG
CCAAGAAAAATTACAATCATTCCAAGTAATACGTGTTTTTCCCAGACACAAATCTGAGGATCTTGAATCTTAGCACTGGA
AGGAATGTAGACATCACGCAGGCTCATCACTTCTCTGGCACAGAACTTGACTTGCCTTGAGCACATGTCTGGTAGCTTC
TTCCTGGGAACATAGATGACATAACGCATATTGCCCTTTCCAGGCAGCTTGATCTGTGATGAGACAGCTCTGGCCTTTTA
GAAACCAGCCTTTATACTGAGCTGTGAGCCTGCTTCTCTGTATTGCACATTTTTTGTCTTAATCTGAACAAAAGTT
TTTGTGAATTTTCTTCTGGAATGGTCTTCCACCCTTGAAACAACGTGTCATGCCCATCTGAGCATATTTCTTAGGTGA
GGCTTCCCAGTTTGGGAGACGCTTCTCTATAAAATATTTCTGAATTCATCAGTATCTCTGTTCTATAAAACGCGTGG
CTGTCTACTTTCAGGCAAATCCTAACCAAGCTCAGGTAACAGTGAAGTGATTGTTTGGCTGTGAAACAGTATTGTACTGTT
GAAGTTAAAGAGGCTATGATTACATTGTGTTTTATTTTGGATTTTGCATTATTGAGTATTTTTCATTTTATTTTCTTTT
TGTAAGCCCATATCACTACCTATAACAAGCTTTTGATAAGTGAACCTTCTAATTTTTCTTATTTCTATAGCTATGTAAG
GGAATCTTTAAATTTTGCCAGGACTTCTAGCCTAATGCAACAAGGGAGGTTACATTAACTATAATAATTTAAATTTCA
TTAGTTTTTTCCACATTTGCTGAAGCAATCTTCTACCAAGCTATTTTCTATTATTTCTGGGAGTTCTAAATGTGTCCC
ACAGGAACACATCCCCCTTCTTGGAAACCACTGCTTCTCCACCAGAACCAGCAGCTCTCTGGACTCCCCAAGGCTTATTA
GGTCTCATTGTTTACCAGGGAGTCAAGCAGCTATCACAAGGCCATGCTTTGGCTTTGTAGCTGCTCCAATGGATGTTAA
AATTTCTCACTTTGTTTCTGATACTGTACGGAATTATATGCAACATCTCTTTACTTAAAGCTCTCTGCTTCTCCCAGG
ATCCAGAGATTTCATCCCTGGAAAAGCATTCAGTGCAGCTGCCATATTCCATTTAGAATGCCTCCTTCTTCCAGACAGC
CAAGGTTTTGTTATTGGGCTCAGCTCTATGTGCCAGCTCCTTCTCAGTACAAGGAGCTCTCTCCAAAGAGGTCACATA
AATCCCCTGCAATAGTCTTTAACTAGACCTTTTCAAACCTGTCTCTTTTTTTCTTTGAAATGACACTGTACCATGA
ACATTTTTATGAAATCATTAAACATGTTAAACCTTCATCAAGCCATCATTTTAAAGTCTTCCATGATGTCTATCTTATA
GAGATACACCATACTAGAATGCATTTTTTTTCAATTTTTCTATTGCTGAGAATGTTGGGTTTTATACATAGCTTGTTATTT
TAAGTAAATGTTGTGCTTTACCTTGTTCTTATTATACTTTTAATTAGCCTACTGTTAGCATCTGTGGATGATTTTCTA
TGCTTATATGCTCACTCAATATATTAGCATCATTTCCAGCTTTTGGCTTTACATATGCATTTTAAAGATGTGTCTCTTAC
CTTTTAAACCATCAATCAGATTTTAGTTGCTTGATAGACCCAGCTTTTATATTTAGTTTATGCCACCTCTAAGGTGCT
TGTAAGTGAGATGCCTATATAAAGACATACAAATTCAGGAGTGAATTAATCTCACTTGAATTTTAAATGTCACTG
AATATTAATTTGTTGCTCGCTAATTTGGTATATTTTCTAGTAATCACTTCAAAAGCTCCTCATTAATAAATAAATCATAAAA
TATAGAATTATAAGAGCTTTTAGGTATAGTTCAATGATCTAATTCATCCATTTATCTGTCCATCTATCTTCCAGCAAG
TCATTTATCACCTTCTTCTGTATATTACAGATGATAATAAAGACATCTGGGACAAAAGGTAGTGCAGACCTACCC
ATGTGTATGGGTGATAGAGTAGTGAATACAAGTGACAAAGGGTGATTCTTCTGTTTGGAGAGTGAAGAAAGTATTC
CCAAAGCAAGTGACATTGAATCAGCACCTTAAGATAAAACGAAGAAGCTCAGCAGAAAGAAAGTGAATGGGAAGATGTGG
TAATAGGTTTAAATGGACATGGCATGTGCGCACTAAATTTCTGTAGCTCCAGAATATTCTCCCCAGTCCCCTGAGACG
AAGTTACAGAGCTGTGAATCCGGTAGTGAAAGCCTTGGTATAAGGCGCATAAGAAATGTGCAGATTATCTACCATGAAA
TAGAGGAAGAAATCAAGGTTATTCAAGTAGAGGAATGACACGTTTTAGAAAGACTTTTGTATTAACGTTATGGGAAATG
GATTATAGGCTGGAGGCAAGAGATAAGACATTGTGAGTGTGACAGAATATTTTATTAATAAAGCACATAATTTATACTC
AGATCTATGTGAGATGAGACCAATTCATGTCAACATGTCCAATGTTTTTGAATAAAGTGAAGTTTATATCGCTTT
TGTTTATTTCCCTGTGAAATATAGTAGGCTAGCCCTCTAATTTCTCTGGCGAAATCTTTAGATAGGTGGAATAAAT
GTTGAAAAAGGGCATCAATGACCTCTTTTATCTTGGTTTTATCTGCCTTTTGAAGATACTTGATTCAAAGCTATGAAA

184/375

AAGCATCTCACCAATCCCGTATTTCACTTGGTTGGACGATGTGTCAAGAGAACGCCTGAGGCTTCCTCTGTCCGTTAAC
AGGCCAGTCATGAGTCACAGTCTGAACATGAGGAAATGTTTCATGTACTTTTTCATAGTCATGGCAATGAGACTTTTTTG
TGCCCAAAGTACTATCCTCGCCTAAAGTCCCTGTTAAAAAGGTTATTTTCTGCCACAGGCAGGTAGCAGAATGTCAAGA
TCCAATTCCAAGTGTTCATCATCACTCGGATAGCCTCAGGAAGCTGAGGTTTACAGCTGCCTGGAACCCACATGCTT
CATGTGATGTAGAGCAGCCCTGTTAATTAGCTGTTTCAGGATTCTTAATGCCCTATGGCTTTGGAAACACTTGTTAGCC
CACAGAGGGAGGGGAAGAGCTGGAAGCAATTGGACTACAGCCTGAATTTATTTTAATTCAATTCAGTAACCACTTATC
TTTCTAAATCCCTGTTTGAATCTGTTGAAAATTATAGTTGATTTAAGTTTTTCTCAGTGATGCATCCTGAGAGAAGAG
GGAGATTACAATTCAAGGTTTTCTGAAGCCACAGAAATGTGGAGTGCTGCAGAAAGAGCTGATCGATGGAACTTCCAG
ACACATGTATGCAATTTTCTAAAGGCTAGAAAATAGATGCCGGGGATGGGGGAGAGGGGAGGCCAGTTGATGTGGAAAGG
CTTGTTGATAGAGTGCCACGAGTCTGCATTTCTGTTTCACCTACCAGAAGAAACACTGCCAGTTCCCCCACCCTCACCCC
CCAACATTCTCACTGCAGAGAGCTGGCACTCAACAAACTCATAATTTTCTCAATACAATTCTCATGACATAACCTGA
CCAACCATATGAAACCTAATGAAGAAAACAACCATTTGCCATTGGCAACAAATGCAGGAGTTGCATCACAAGTAACAC
ATACTTTACTTCAAAATTTGAACATTAGAGTACCAACGGCAAAAACATGGTACCATCCTTCGGTATGGATGAGATATC
AGTTTACAAAACCTTCACTGGAAAGTCCATACCAAATTTTAAATGCATGCAAAAGCTAATGTGTTGACATCTTTC
TTATCAGAGCTATTGCAAATTATTTTGTCTAGAGGTGGTCTTAAACAGCCACCTGTCTGTCCACTAATCATGTACAT
AGCATCCTCTTCTCATATTCTCTGAAATACCAAGAGGTGAAAGAGTGTTCAGTAGCTCACCATTCTTGGCTGT
TACATAATGGGTGAGATTCTTTCTGAGTAGTAGGAGAGGTCACTGATCCAGATCTATATATCTTGTGCTTTTCCAC
TAATACATTCTTAGAACCTAGTAGGTGCTCAATAACGTTAGCTGTATGAATGAGTTAGTGAATCAATGAATGAAGTGT
TAATTTTGTAGAAATATTATGGTCAGAATTTTACTAGGAAAAACATTTCTTATAATCACAATGAAAGCTAGGTTTACTC
AAAATTGGGAATAGTAGTAGTCTTTCCATTTCCTCATACCCACAGGTATGCTTGTATTCTTCTTATATGCTTATGAAAGA
AGAGAATTGGATTGAATTAAGTTATAAACTATTTGTACATGATATTGTATATGTAAAAATCATGTGAGTTTGGAGCCAGGAT
TTCTTTGTATTGAGTAAATTTTCTAAATATTTGCCCATTTGTATTAGTTTCTCATTCTCACATTGCTGATAAAGACATACT
CAAGACTGGGTAAATTTATAAAGAAAAACAGGTTTAAAGGACTTACAGTTCCACGTGACTGGGGAGGCCTCACAATCATG
GTGGAAGGCAAAAGGCATGTCTTACATGGTGGCAGACATGAGAGAAAATGAGAGAAAACCATGAAAAGGGGTTTCCC
CTTATAAAGCCATCAGATCTTGTGAGACTTATTCACCTACCATGAGAACAGTATGGGGAAAATTGCCCCCATGATTCAAT
TATCTCCACCAGGTCCCTCCCACAACACATGGGAATCATGAGAGCTACAGTTCAAGATGAGATTTGGGTGGGGACACA
GCCAAACCACATCACCCATTTTAAACAGGCTTGATATCAATTTATTGCTAGAAAACATAATTTGTATTTTCTTTTAC
ATTTTAAATGACTGATTGTACATTTGTTCCCTCAAAAGAGGCTCTCCAAAATACCTGCTAATTCCTATGTTAATAGCAA
CCCAAACATGTTTCAATACTAATATTTAAACAAATTAGCTTAAACAAATACAAAAGGTAATGCCCTGGTTTATACAATAC
GGATTTGAGAAATGCAGGTTTCAACCTGTTCCACACCATGCCCTTCATTATATTCTTCTGCCAGAGATTTTATTCTTTA
CTTTTCATTCAATCAGAAAGAAATTGAGAGGAATTTGAACCCATTCTGCCTATTTAGAATATCATTTGTACTGACTTTAA
TCTTTTGCTCCTAATCCATGAATTCCTGAGGTCTTTTATTACATCCATAAATTTGAAAAGCAACAATCCCCTTTTTTTT
TTAAAAAAGGAAGTTACTTTTGGGAATCAGAGACATGCTACCTCTTACACAGATGAGTCTTAAACCTTTGTGAGC
GGGAGGGAACCTCATCCTGTTTCCCTGATATGCAGTGAATTTCTCTTACACAGATGAGTCTTAAACCTTTGTGAGC
TCAGACAAGTTGGCTGGTTTTATTTTATTTTATTTTGTAGATTGTCTCACTCTGTCACTCAGGATGGAGTGCAGT
GGCCCAATTACCAACTCACTGCAGCCTTGACCTTACAGGTGAAACCATCTTCCACCTCAGCCTCCCAATAGCTAAG
ACCACAGGTGCACACCACCATACCTTACCTTGGCTTCCCAAGTGCTGGGGTTACAGGTGTGAGCCACCATGCCTGGCCAAG
TCCTGGTCTCAACCAATTCACCTGCCTTGGCTTCCCAAGTGCTGGGGTTACAGGTGTGAGCCACCATGCCTGGCCAAG
TTGCCTGGTTCTTTACATGGAATGTTCTTTACATGGAATGTTCCAGGATCAATTAACACAGATAAATAACAACCTTATG
TTTTGTAAATAAACACATCTGAATGGAATCTTACTCCAATTTAGATAGAAATTGATATTTTCTTTTCAATGAAATAA
ATGTTTGTAGACTAGGACATCCAAGTGAATTGAAGATTGGTACAGGAGCCTGAGGAAGGAAGTTTAAAGAGAGTGAAAGC
ATGAGAGAAGAGCCAAGATTATGTAGCCAGAGAAGGAAGAATTATTACCTACCATTACTTTAAGGGACTGTGCTTCC
TCACAGTAGTGAAGACAGATGCTCATTTTTTTATTCAAGACTGTGTAAATAAATGGCCTTAATTTATAGATGTGGATG
CTGGTTTATATCAATACACCTCAACCTGGGATGGCTCAAATCTTGACTACACATGGGAATAACTTGAGGAGTTTTACA
AAAAAATGATGCCTGGGTACACCTGAGAGATTCTTATTTATCTGGTCTGGGGTGGTGTGGCCAGGCACTGAAATT
TATAAATTTCTCGGGTGATTCTAATATGCAGCCAAGGTTAAGAATGCAGCTGTACAGCTGTAGATGGAAGAATACCAA
AACCAGGCCTTCTGCTAGTGCCTGAGCTTCTCCTCATTTTAGTTTCTGTGATGTGTTCAGACATTGTTTCTAGAATCTC
CTGGGTAATATGAGTTATAGTCTTTGGATGGAGTAATACATTAAACACATCCATACTCACATAGTTTGAAGGGGCCAG
GATGCAAAGGGAAGTTGGAGGAGGAAGAGAAGGAAATGGTAAAGTCAAAGCATGGGTGAAGGGGGGCCAATATAAACC
CACAGAGCAAAAAGGAGATGTTGGGTGATCATATTCTATTACATAAATTGGATTACATTTCTTGTCTTTTCAATTGCTG
GTCTTTATTCCCAAGTCTCAAATACAGTCATAAAATTCTCATGAGTTGTTATAGCAAAATGCTTATCATCTACTACTA
TTTCTTAAATGAATGCATAAACTGTATTACTTTGGCAGAAAGGATGCTGCTGGGTATCATATGTAATGTATACTAGTAA
GGTGGACAGGACCATTAGGACTTTAAATTCCTTTATAATCTCAAAGTCTGTGATTCTGATCTTCTTGGTCTTGTCAACT
CCAGAAAAGGTGGTAATCACTGGAGTAGGCTATTTTGGGCTGTGAGATAGTGAAAACATGCTATTAAGACAAAATGAG
AGACTTCTTCTCTGAAATGGTTCCATATAAAAGTAATATATGGCTTAAGTATCCAGGGGCTCATGTAATCTCTCCATG
TCAGTATCTTTTACGGGAATTTAATTAACCAACATGTATTGAACACTTACGTGCTACACTAAAATCCCAGATTTGTCA
AGTTCCCGTTTTAAAGGTGGGTACTAAGCCTAAGATATTAGCAATACTTGTATCTGAAAAGGCCTCACATCTAGAACT
ATAAAGAACTTCTAAAAATCAATCAAAAACAACATAGTTCTTAGAAAATCACAAGGAACAGGTTTTTCAGACTCGAGGA
TGCTTATATGGTGAAAAGCAGCAGTATTTTAGAGTTGGTCTGAACTGACTCACAGGAACCTATTTTAAATGTCCAGA
AATTTGCTAAGCAAATTTGTTAATGCATCAATTATCTAAAGTTTAAATTATGTAACTTCAAGTTATCTGAAAACATAAC

Fig. 6. [179]

185/375

ACATACTCAAAACTCTCATCCCTTCCTAAGTGTGTTTACTACATTCTGTTATTTCTGTTTGTGAGGTCATTTGTTTATTG
CATCTGTATGATGGAAACACTGTATATAAATGACATGTTATTCCCAACTCCACATAGGCTGATATAACGTTGGTAGCTTA
AAATCAGCTTTAGTCCAGGTATTTATACAATGGAAATGGAAATCAGCATACGCCACAAATCAGGAGTTGATTTTTTTTTT
TTTTTTTTTTTTTTTTTTTTTTTTTGTAGATGGAGTGTGCTCTGTGCGCCAGGCTGGAGTGCAGTGGTGCATCTCGGCTCA
CTGCAACCTCCGCTCCTGGATTCAAGCGATTCTCTGCCTCGGCTCCTGAGTAGCTGGGATTACAGTTGCCCGCCACC
ATGCCCTGGCTAATATTTGCATTTTGTAGTAGAGATGAGGTTTCATCATCTTGGCCAGGCTGGTTTTGAATTCCTGACCTC
GTAATCCACCTGCCTTGGCTCCTCAAAAGTGTGGGATTACAAGCATGAGCCACTGCGCTCGGCCCAGGAATTGATTTTT
TGTTTAATGGTGTGACTGTCTACAACTGATTAAGAAAATGTTATTAAAGTTGTACATCATGTCTGCAACCATTAAAT
TGTAAGTAGCACAAAAATCTGGGGGAAACAGTCTTCTAGACTTTCCAGATGCAGCAAAGAAATTGCTTGTTCACA
TACATTTTTATTGTTTCACTTTTGTCTTACTTAACCACTAAGTAAGACATAGTTCTACATAAAACCAATCATGTAGGAA
TTACACTCCTTTTTCAATTACAACCTTTGGTTTTGATTACCTTTGTGGTCTTCTGTTCTATCACCGTCTTTTTTTTTTTTT
TTTTTTTTTGAAGGAGTTTAACTCTTGTCAACCAGGCTGGAGTGCAGTGGTGTGACCTCCGCTCACCATAACCTCTGC
CTCCAGGTTCAAGCGATTCTCCTGCCTCAGCATCCTGAGTAGCTGGGATTACAGGCACCTGCCAGCACATGTGGCTAA
TTTTGCATTTTTTAGTAGAGACAGGGTTTCAACCAGTTAGTCAGGCTGGTCTCGAACTCCTGACCTCAGGTGATCCACC
TCCTCAGCCTCCCAAAGTGTGGGATTACAGGCATGAGCCACTGCGCTCAGCTCACCATCGCTTTTAGATAAGGAACT
GAGCCCTAGAGAGTGGTTGGCTCGCTCAGGCTCCAGGACAAATATGACTTAATCAAACTATACTCCTGTTCTTTTCAT
TCACATAAACTACTTATCTAAGGATGCTGCAGCAACACTGCTGTGAGGCCAGAATTGAGTAAGTTTACAGCTGAGGCC
TTATCTATAGACCATTGATTTTGTCTAAGGAAAAAGTTACACAACTAGCAATAGAGTCTGACCAGGCATTACAAATT
CTACACTGATGTGTAAAAGAGGGACTAGGCACAAAGAATACATGCTTAGCACAATCTATCTTTATTATAGGAAAAGCAA
TTTAAACATATTTTACTGAGTAGTGCCAGAAAATTACCGAAAAGAAAGTTAATGCTTTTTCTTCTCAAAACCTTTC
TATAATGTGTAGGCATTGTCTATTTAGAGAGACTCCTGGGAAATGCTTGGTCAACTAAAAATTGTTAAAGAGCTAAAATT
GAACATTGACTCAGAAGCAATGTGAAATACATCTTCCCATTTCCAGGATGGAGTGCAGTGGTGTGAGATCTCAGCTCACTG
CAACTCTGCTCCTCGGTTCAAGCAATTCTCCTGCCTCAGCCTCCTGAGTAGCTAGGATTACAGGTGCCTGCCACCAT
GCCAGCTAATTTTAAATATTTTGTAGTAGAGACGGGGTTTCCCATGTTGGCCAGGCTGGTCTGAACTCCTGACCTC
AGGTAATCGACCTGCCTTGGCTCCTCAAAAGTGTGGGATTACAGGCGTGAGCCACCGCGCCGCTCACTGACGCTCTT
CTTAATTTCTTCTGCCTAAGAAATAGAAGGTATTCTCGAGGAAAAAAGGCATTGACAACTAGTACAGGGAATTGATG
ACAACATAAGGCTGTTTGGAGAAAAAACGTGGGATCTCAAAGACTGTTGGTGGGAGTGTAATTGAATAATCTACTTTG
GAGAACAAATTGGCAGTTTCTATTAAATTTAAAAATGCTGATATCTTATCAGTTAATCCTACTTCTAAGTATCTATTA
TTAAAAAAATACTTGGCATGTATTTCCCAATGCGTTTGTCAAGAATGTTCTTTGTAATTGTCAAAAAGGTGGAAATCTGA
ATGCCCTCCAGTAGGGAATGGCTAAATGAAATATGAAATAACCATACTATTGAATACTATGCATCAGCTAAAAATAGC
AAGAGATCTTTGTTGAGTGAAAAAATAAATGCTGATTGATCATTAATATAACACTATGTTTTTAAGAAGCCTCAGAA
AACAGTAATATATGATCCTATAGGCATAAAATTTATTTATGATATCACACGGAGGTCTATAGAATTTATTGTCCTCTATG
GTAGCCACTAGCCACATGATGCTATTTAAGTTTAAATTAATAAAATTAATAAAAAATTAATAAAATTTTATGTCCTCATTTCT
ACGAGCCTCATTTACGCTCCTAATAGCAACATTTGAATGGTGGCCAGTGTAATGGAGAGTGCAGATCTAGAAGAACA
CACAACTGGTAACAGAGTTACCTGGGGGAAGGTTGAGTTTGGGGATGGAGGGCTACAGAACTTTAGAGTTCTGTCAGAA
CTTTTAACTTTTACAATGAGAATACATCATATATTATCTAGCTAAATTTAAACAAATACATTTGTTAAATGAAAAGC
ATGCCCTAGCCAAAGGATTTCTTTCTTTTTTTTTTTTCCGAGACAGAGTCTTGTCTCTGTTGCCAGGCTGGAGTGCAGCG
GTGCAATCTCGGCTCACTGCAACCTCCGCTCCTAGGTTCCAAAGATTCTCATGCCTCAGCCTCCCAAATAGCTGGGAT
TACAGCATGTGCCACCATGCCAGCTAATTTTGTATTTTAAATAGAAACGGTTTTCATTGTGTTGGCCAGTTTGGTCTC
AAATTCCTGACCTCAGGTGATTGGCCCACTTGGCCTCCCAAAGTGTGGGATTACAAGTGTGAGCCACTGCACCTGGCC
TAGCAAAAGGATTTCTAAACAAATGTAGAATTTTAGTAGATAGATCAGTATAAATTGATTGTAACACCTTACCTTTTTTA
GCCTGTTAACTATCTAAAGCATAAAAATAGTAAACAAACGGCAAAATCATTTCTCTCTCTCTTTCTACCTGTGTC
TAGTGTCTATTGAACACTTACTATATTTCCAGCATTTAAAGTACAAGAATCATGAGGCAACTGCTGTTTAGACTGAAGT
GTTTTCAACAGGGGTGTATCAAGAGGATTTCTTTGTATAGGTTGATTTCCCTTATAACTGATTGATTAAATAATTACT
AGTTGGCTTATGCAATGTTTATATAATTACAGGATATAAATGGTGGTTATTAGCCTAACTAGAATATATGCCTTTATAA
TATTGGTGTAAATATTCATATGTATTTTACTACAGCTTAAATAATAATTTTCAAGAAAGAAATTCAAATTGATTTTCATAA
TTTAGCAACCATTTGAGCTCTTCCAGGTGAGAATAACTTCTTGGGAAGCCCCAGAAAGAAAGCATATACCTGCTTTTA
CAGTTATCCATAGATTGACTATAAGGCTAGGTATTGAGTTGGCGGATGCATACCTTTCTTAATCTTTTAGATAAATAGGTC
AATAGTGTGGTAGTGAATCTTGATGGTAAGTGTCTTTCGATGTTTCATCTGACAGTAGACTGAAAGTCCCA
GGAGACTGTGAGTGTAGCAAGAATGAATCTTGTATCCCAGATACACAAAGACCATGCTTCACTGGACCCACAGAAC
CTAGCACATGGTGTGCTTATTAAATGCTTGTAGAATAATTAAATAAATTACATTACAGAAACAGTCTATAAGTCTTAA
AGTTTACCTTTCAATTATGTAATTATTACTTTTAAATTTATAATTTATTAACAGACATAGATTTTACAACACCTGCAAA
AGAGTTTATTTCAACTTCTTTTTTTTTTGTCTCATCTAAAAAGTGTGGATTTAATATAGCAAAGTTTGCTTCTAGAATGGA
ATCTTTTAGAGTGTATATGCGCTTTTGAAAAAAATGGTTTATGATTTTGTATGTAATACTGTTATATAAGTTATTTTA
GAAATTGCATGATTTATTATAATATCAGCAGTGAATTTAAACATTACACAAATGCCTGAATATAAAGAAATAGGATCAC
CTGTGTCCAAGTTAATTGCCTTCTTTTGTCTGATTCTTAGGATCAATACCTACATAATCTAAGGCCAAGATACATAT
GGAGCAATCTATGGACAGGCAATAGCATCCCATGGGAGCTTTGGAAATTCAGGAGCTCGAGCCTCACCAGATGTACT
GAATCAGAATCTTTATGTTAGCATGGTCTCCAGGTGATTTGTAGGTCCATCAATGTTTGAAGAGCACCTGTCTGGCCTT
CAGTTGCCTTTATACATCTTCTTACCAACAGTACCATCTAGTCCAATATTTTTCTGTCTGTTAGTTTGTCCATAGTCT
CCCAACAGGCTTCTGTCCACAAAGCTGTTATTTAGAGGCATGGCCCCATCCTCTCATAGTCTTTGCTAAGGTTATGTC

187/375

TTATCTTCCTTGTACCACCTATAAATGATTAATGAGACAAAACATTTTCAAGGATTCCAAATAATCTAAAAAATCCCA
CAAATTTTGAATCCACAAAGAGGTATCTAGGAAAACCTTTCATGAAGTTAAGAGATGTATCTGCTGTTCTAGGCGTG
GGTGACTTTTATCAAACATTTGCGCCACTTTCAAATTTCCACTTGTTAAAACCTGAGGCCTTATTTGGCTGTCACTTAC
TGTACAGTGTTTTTCAGACAAGTTCCTGGCAGCTAATTTTAAAGAGATTTTGTGAAAAACACAAGCTGTGGAGTGCTCC
TGTGGGAAGAGCACCTCTGACCCTCTGCCTTAACATAAGAAAAAATTGCCAGTCTGTCCAAACCTCACCCACCTTTGG
TTATCTTCAGAATCTTACAATTTGTGTTTCTTAAGGCAGCAATTTTCAAGCATGACTTTGAAACACTGCAGGCTTTTTC
AAGTTATTTCAAGGACTGGCCAAGAATTCTCAAAACAAAATTAATTTTGTATTTTAAAAAGCAGTATGCATATCATGT
ATCATTGGCAGATTTAGGAGGTTAACAGTAAGCATTAGGAAATTGAATCAATAATAATGGGATATGGGGACCTGT
AAAGAACTCTCAATCCTGCTTCATTACTTTTAATGGCAAAAACCTGTAATTACTTTTGACCAACCAAATACACTGAAA
TCCTTTAACATACACCAAAGCAATGGGAGATCTGCAGAATGCTTTTGTCCATGTTTAAACCATAATGATCAATGCATTTT
GAATAGAATATTGTTATATCTACTATTTAGCTTAATTGTGATCATTAACAAAGTGCCAGACTCTCTGAACATTCTACA
TGGCATACTATTTGTGAGAAGATCAGCATGTAAATAGTTTACTCTTTGTAAAGCTCTTCTACAAGGTGGCTAAAAGCAAG
AACTAGAACCAGAGTCCCTTGCAATCAATGAATTTCCCTATTATTGCCCATATCATCTTTCTTTCTTTCTTTCTTTCT
CTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCT
CTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCT
GGAGTCTCGCTCTGTGCGCCATATCATTTTGTAGTAAATCTCTCTCTTTACTTTGCTTGGTCACTAAGAATCACTTTTCTCTAC
TTAGAGCCAGACATTTAAATATCTCCAGCCTCCAAGATCTCGTCTGGGTACTTGGGCTGCACCTTTTTCATGTCAATCAT
TTTGCACTTGTCTATCTCTATTAGGCTATAAGCTCCCCAAGGGCAGATATAGAGACATAGTATCAAGCTAACCTTTT
TATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTT
GATCATGGCTCAATGCTGCCTCAACCTCCCAGGCTCAAGCAATCCTCCCATCTCAGCCTCCTGAGTAGCCTGGGACTGC
AGACGCATGCCACCACACTCAGCTATTTTAAATGTTTTATAGAGACGGGGTCTTGCTATGTTACCCAGGCTAGTCTTG
AATTCCTGAGCTCAAGTGATCTTCTGCAATGGCCTCCCAAAGTGATGAGATTACAGGTGTGAGCCACCACACCTGGCC
AAGCTAATCTTTAAATATCTAGAGCACCCTATAGTGTCTGGCAAAAATAAATGCCCATAAATGTTTGTGAATGG
AACTGAGTCTTCAGAACTAGAGATTTTCTAAAATATTTTCTTTTGGCATTTCAGTTTAAATACATATTAGTTTTCT
CACTTATCCTATCATCTGAATTTTATTTCTTTGAACCTGAACAGGCTTTGTGTCTACAGACTGCTGAGCCTTTAATT
TTGTTGTGCTTTGTTTGTGTTTGTGTTTGCACAAAACATAAAACATGTACAAATACATTTTAAATGCAATTTGTTTCTT
TAGTTTTTACTCGTAAAGTGCACTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCT
CAGAGTTTTCTCATCATATACGCAATTCATTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCT
GTATGTTTTTCTAAGTATTTGTTCCAAATCCTTTCCATTAAGTTACAAGCTCCTTGAGGGCAAGCATTGCACACCTGTTTTG
CACAACTTCTAAGGCCGTTTCAAGTCCCTCAGCCCACTGTATAGAAATATAGTATATATATAGACAATACACACACATG
CACACACATACCTTGCCACTTAATGATGTAAAGTGACAAAACCTTTATATATTGGTAAATAATGAGATAAAGAATAAT
CATATCCTGATTCTTCAAATCAAATATTTGTCTAACATTTTGTATGTAAGTCAATAGCATTATGTGTCTATTGAATTGT
TGTGGGCATGCTAACAGGAAAGATGGACCAAGTTGAGCTTGAACCTGTCCTTCTGTGAATAGAACCCTCAGAGTACACTTTTC
TGTAACATTTAAAGACAAGGAATTGGAACTTAAAATGGAGCAACAGGGGGGAGGGGAAACAGAATAAACTTTTAAA
ATTGACCTAATAGTAATCATAGGAAACAAAAGAATCATTCCAGTCTCCATTTTCTTTCTTTCTTTCTTTCTTTCTTTCT
TCCCTAAGTTATTTGGGTTTTTAAAGAAACATAAAATATTTCTTAGATCGTTAGAGATGTGATTGATTTCATCCACATG
GTCTGTAGCATCACTAAGCTACTGGGAACCTCCCTATGCAAAGGTTTGTGTTTCTTTCCAATGCTGTTTAAATGTCTGCA
CTTCTAGTGTCCACATAAATGAGATTTAACAGGCTTTACTTCTACTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCT
TTGCAAAATTTATTTCTTTTAAAGCTCTCTGAATAAGTTTGTGTAAGCTCTATTATCATCACATAAAATCTTACATTAAA
AGGCAATAAAGGAATCACGAAAAGCTAGATGTATTCCACCCTCTTATAGTTGAATACATAAAATGTATATATACAAA
ATAGTAATTGAACTACTCTTATGAAAATCTCTGTCTTTCTGGAGGGGCATTAGTTTAAATGCAAAGAGAAAAACATAT
CATTTGTGAGTCTAAATAGTGTGTTAGTTCTTTGAAAGGGCCCTAATTAATAAGGTTGTAGAACAACCTGCAACCTG
TAAAGCGTTCCATGTGTAGTATTTTGAACCTTTTGTGTTTGTGTTTGGGTTCTAACTAGAGACAGAGGGAGAAAAAGTCAAT
TTCATTCTCATGGGATTTGTCTTATGTGGTTCTATCAGATTGAGTTTAGTAAGCAGGGAAGTATTTCTCTTTGTGTAGCT
AGTGCTTGTATTATCTTCCCTTATTAATAAAGAGAGAAAAAACAAGGATTGGCATTTTCTTTCTTTATGAACGTG
GACTGTAGGGAGATAAATAGCCCTGCGGGAGAGGAAGGTCAAGTTCAAAGTTTTCTTTCTTTCTTTCTTTCTTTCTTTCT
CAAATGGAAGACTAGCCAAACAACCCAGCAGCAGGCATCTGATGGTTAAGCCCTCCCCCAGGACTTTTATGTATACAT
AAGCAGCAGAAGTCACTCGCGCAGCTGCGGCGCATTAGTTCCAATAGTTTAAACAGGCTGCTTTGTAGCAGGACAAAGC
CGTGCGAGCGCGGTGCTTTCCCTCCTTGTTCATTGCTATGCGAGCTTGTGAGTATCTTTGGCAGGGGCTTGGGAGAG
GAGGGGTGACGTTTAAATACGCTTCCGCGGAGGAGTGCGCTCGCTCCTCTGCAACCCAGGCTCTACAGAGAGAC
TGAGGCAGGCGACTGAATGCACTAACAGCAGCAGGCTCAGACCTGCTTCCCTGGACATTTCCGGGACCGTGAGCGAGGG
AACCACGTTGCCCTGGATTCTTGCCAGCTGTACAAAGTTGACCCAGGAAATGGCTCAGCAGACAAGCCCGGACACTTTA
ACAGTACCTGAAGTGGATAATCCGCATTGTCCAAACCCGTGGCTGAACGAAGACCTTGTGAATCCTTGCGAGAAAACC
TGTTGAGCATGAGAAGTCCAAGACAGCGAGGAAATCGGTTTCTCCCAAGCTCTCTCCAGTGATCTCTCCGAGAAATTC
CCCCAGGCTTCTGCGCAGAAATGCTTCTCAGCAGCAACATCCCCAAACAGCGGCTTTACGGTGGCACATACATGGTAA
GGTTTGGCGCAGACCTCGCAGAAATGGTGGCCGTTTCCCTTCAAGGAGTCTGCTCTCGCGCTTTAATTTTGGGGGTAG
GGAGGGAGGACCATCATCTTCTACCGGGGATTTATGGCCAAGTGATCTCCCTTAACCATAAATCCCACAAATGTCC
AAGTCAGGGCAAGAATCCTGGAGACTGGTACTAGGAGTGGTTGAGGTGGGTGGTTCTCAAAGTTCAATTCTTATTGCAA
GTTCTTACAAGAAATTTGGATGCCAGATGTCAAATAAGAATGCAGTTTATTCCCATACGTACGTAGTGGCGTTTCTTT
GATTCTTAAACCAATTTCCCTGCCAGCTTCCCCAACAGCTGAGGAAAGAAAGGACCAGAAATGAGGGGAGGAAATCA

188/375

TAGTTTGCCTCTGTTTTCTGCATGATCCCCACTTGGACAGAGACACATACAGTGTGTGTGTAATGGTGGTGTGTCTTTCAT
 AAAGCCCTTCCCTCACTCCTGACTTTGATATACAGTATTCAATACTTAAACATGCCTTTCCAAAGGAAAGAAAGGAAAGG
 ATTAGGAATTCACGCAGAAAGTTGCAGGCTGGTACTTGGTAGTATTGTTGTGTTCTTTGAATTTGGATTGTTAGAACAA
 TTTTGCCAATCTTTTTTATTTTCTTTGTGAATATTTTTATCTTCTTTATAATGGGTGAATTTGTTTTCATGCATATGCTTC
 CATGTATTTTTCTGGAGGATTCCTCATCTTTTTCTGCTCTTGGAAAAAAGAAAGAAAAACCCAAATATTAAAAC
 AGACCATCATGTGAGCTTATTTGGAGTATTTGGAGTTTCTGCCTGAGTAGAGGCCATTCCAAACTCTGATCAGTGAGTC
 CAAGTACTAGGGTCTATGTTACACACTTAGATAATTTTCAAGGTAGTAGAGTTCTATACATTACATCTACATTTTGATA
 AGATGAGTATAAATTATGATAAAGAAAAATAACAAAAAGAATGAGTGTGTTAGTTGAGAACTGTATGACTAAATAA
 TTTTTTACAGTTTGGCCATACTAACTAAACAGTATGTACGTTAGCAATGGGAGGGAAAAAAGCAGAAACAAGGCT
 TTTAGGAGGAAAGCAGCAAAAAGTAAAGGAATTAACCTAAACAGTGACAAGACCGTGCTCAGGAATGCATTGATG
 TTATAGATGAAAGTCAATGACAAAGGAAATAAAAGCCATGTACACCCAAAGACATGACCAACCTCAAAAATTTGGTTT
 TAAGTAGCTAGATCTCTGACTGGGAAAGTGTATTGTCCCCAGGATTTTAAACACCTAGATGGCATTTCTGAGTTTGGTA
 GATGTAATGGCCATAAGAGGAGTGAGACAAACATTGACTTTTTCTGTCTTAAAGCAGTTTATTGGGAAATGATGGCTTCT
 CTTTGAGGAAGATTTTCTTTTTTGGAAAAAATTGTGAGCAACAAACAGTGAATAAAAGAAAGGCATGAATAAACACTGGG
 AGATGCACTGAAGGAGAAGGTTGGCTCAAGGCCAGGCATCGGGTGCCAGAGCAGGAGAGCTGGCATGAGTTCTTACGGA
 GCCAGGACCAGAATTTCCGTGTCCAGTGTCCCTTTTTGGTTGCGCTGCTTTATCACTGCAGTTCTTAAATTGCACCCATT
 GCTGAATGAGTGGCCCTCAACTCAGCTGTTTGAATTTAGTCTGAGTGGAGCAACCTAGAGTTTCACTGGAGGTTATCTG
 AACTATTTAGACATGTCCGGATGTAAGGAAGGCAGGAAATCCCATGAAAATAGGCTTTCTTCTGACATTTCTGGCATT
 CCTTTTCTGGTGTGTTTGGAAAACTTCATGAGCAAAATTTCTATCAATATTTCAATTTTAGTGTATCAGGTCACAGCC
 CAGTAAGAAAAGCATAAAGAGAGCAATGGAACAGAGAAATAAAATCATGGTATCGATTTTCACTAAGCAGGAAG
 CAGTTATCCCCCTTATGAGATAAATATCAGGCATCTTTTGACAAAAATCTCATTTGTGCTTTTACAGTTTGTGCTAAGCACTA
 CCCCAGAGCGTTTCAATAATATCCACAGGCATCTTTTGACAAAAATCTCATTTGTGCTTTTACAGTTTGTGCTAAGCACTA
 TGGAGAATTTTGAATAATGTTTCAAATTTGTTCTGACATAAATAAATAATTTGTATCTAATTTGTTGCTAGTACAG
 TGTCTGCTCAGATTTCTGCTCCTGGTATTCCCTCCATTCGCTATGCATACACTTAATACCTACTGAGTCTAACA
 TGTTTATTCTGTACCTAATTATTACAAAGTTGAGCAAGAACCATTTGTTGGTTTCCAATAATTTATACCATGGTAGAAT
 AAATCAATAATATTGGAAGACATCTGTTTATAGCTAAGATAATCTTGCTGTCTACAAAATAGTCTCCAAATCTCATTGG
 ATTGACACAGTGAATTTTTATTCTGCTTCTGCTTTTGTGGGGAGGCAGCCTGCCCTAGCCACTGGGTGCCTCAGGG
 ACCTGGAATTCTACCATCCTGTGGTTCCATTATTTGCAACATGTGATTCCCAAGGTTGCCAGGCTCAGATGAATCAGGA
 GAAAGACCATGAAAGAGGATGGTATGTGTGAACCTTTATGAGACAGGCCGGGAAGTGACATGTCACCTTATACTCGTTT
 TCTTCTGGCTGGAACCTCAGTTCTATGGCCACATCTAACTGCAAGGAGGCTGGGAAACATAGCTCTGTTCCAAGGCATA
 AAGTAAAGTGCTGGTGGCTAATCTATCTTGGTTATATAGTATGTTAAGGGCTATCTGATTTACCCCTCTATGCCATGGTT
 GAATTTCTAGAATAACATCTGTAATAACATATGCCATTGTTGAATTTCTTAGAATAACATCTGTAATAACAAGTCCTTGA
 ACCTCTCGTCAAACCTCCTTGATGAAGATTATACAGAAGCACTTCTGTTGTTTGATAGGGCTGTTGATTGGAAAGACCT
 TGCTTCTAAACAGTAGAAGTCTCCTTCCCTGCAACTATCATCCATGGATCCAAGATCTGCTTTGGGAATCCTTACAAT
 GAATTTTGTCTCCCTTCCATTATGAAGCCCTAAGGCAAGTGGCTTGGAGTAACCCACCAGAGAACCCAGGGCCCTATTCA
 TTCATTTTGGTATACCCATGCTTGGCATGATGGCTGGTCAATGGTGGAGCTTAATAAATGTCTGCTAAACAAATTCAT
 TAATCAATATTTTAGTGTCTCATGCTCTTAAAAAAGACTTCTCTTGGGCTAAGCATGGTGGCTCATGCCATATAATCCT
 AGCACTTTGGGAGGCTGAGGAGGCGGAGTCCCTGAGCTCAGGAGTTTGGAGACCAGCCTGGGCAACATGGCGAAACACC
 GTCTCTACTAAAAATACAAAAAATTAGCCAGGCATGGTGTGTCCTGTAATCCCAGCTCCACAGGAGGCTGAGGCA
 CGAGAATCACTTGAACCTCAGGAGGCGGAGGTTGCAGTGAGCCATGATTGTGCCACTGCACCTCCAGCCTGGGTGACAGAG
 CAAGACTCTGTCAACAAAAAAGGAGGACTTCTCTTTTCTTAAAGTAAACATCCTGTTATTTTCAATTC
 TATATGCTATATTTACCAGGTAGTTTTTATCTAGACTTCTCTTGGGTTTTTTCATGATCCATTTAAAGAATAGCTACTGAA
 TTGACAGCATACTCTAGGTGCTATGTCACTCAGCACCAGCAGTTAGAAAAGAGACTAAACTTAAATCTTACTTTTGC
 ATTTAGTAATTGTGTGACTTTGGTCAAGTTACTTAACGTGTGCTTCAGTTTCCCGTTAGTCAGTTTTCTGGGAATAGT
 ATCTATTGGGGGTTGTGGTTTAATTAAAGTACAATTATGTATAAATTAAGTGGTTTACAGGGCTGGACCCCTTAGTGGGT
 GTCATTATAAGCTAGTATTTTTTTTTTATTATGTACTCTGTGCCCATTTATCCAGCCTTGGTCTGCATGAACCTTTAGGAT
 CATGTTTAAATTTCTAGATGATTACTCTGTGCTCAGTCATTTGTGGATGAATTAGAGTGAAGAGACAAGAGTTGAAAGAAAC
 GAGTGTATGTCAGTTTATTTACTGTAGGAAAGGAGAAGGCAGAAATGAGAGATACTACTGAGGCAGAACTGTGGGGTTT
 GGTGTCTCTTCTCTGCCCACCTGCAAAAATACATCTTTCAAATTCCTGGTTTTCTTAAAGGTTCCCTCAGTTCTCCCAA
 CTGGAAGTAATCCGTTCCCTTCCCTTCAAGGAACAGATTTCTATTGCGCCCTCTTGTCTCTGATACCTCAATGCTTATTAG
 TAATAGTTTTATCACTAGCTAGTATGTGTTGAGCATTGGTTTTGGTCTGGCACCATCTGTTAGGATTAGAATTTCTCTTG
 TGTCTCTGCTTTTCACTAATCTGTTTGAAGTTTACTTAAACATGCAATGCCCTTGTAGTTCTAGTGATTATAGACATG
 ATTCAGATTTTCACTGGTAGGGGATTCCTCTATCATCAGCAGGAACACAAAGTCAATGGAATCTCTGGTGAAGAAAA
 CTTAACTTCCAGTACTAGTTTATTTTCAAGGAATTTGAAATCAGGAAGTTCTTACATTTCTTCAAGGCTTTTCTCGTCAAT
 GAATTTTAAAGCACAGTTTGGGGTGTAAAGGCTAAATAAGTTTGAAGAACAAGGTAGAAATGCTGGTTTTTCACTCTT
 TGGGAACCTTAAAGTTGCTGTTTATGTCATATTTAAGTCATAAACCTGTTATCTTACATATTTCTTTTAAAGTAATT
 TAGCATTTATAATCACTTAAAGTTATAATTTTTTTCATATTTTATAATACACATCTATATATCCAGACTCAGATTTTTTT
 TTATTTTTTATTTTATTTATTTATTTTAAAGTTTATAGGTACATGTGCACAATGTGCAGGTTAGTTACATATGTATA
 CATGTGCCATGCTGGTGTGCTGCACCCATTAACCTGCTCATTTAGCATTAGGTATATCTCCTAAAGCTATCCCTACCCGC
 TCCCTGACCCAGACTCAGATTTTTTAAATGCCAAATTTTGTCAATTGTTTGCATCAGTTCTTTTATTTTTTTTAAAGAA

189/375

TAAATGTTACAGATAATGTCTAAAGCTGTCAACCCATCCTATTCCTTCCTTCGAGAGGATCCTGAAATCAGTGTGT
TCTTCCTTGAATGTCATTGTCTTTAACTTCATATGTATGTGTCTGTGTTGTGTGTTTACCATTTTATATATAGAGATG
GTACATGTATATATATCTCCATAATATGCCATACTATAAAATGAGAAAGAGCAAGCTATATATATATATATATATAT
ATATATATATATATATCTTAAAGCAGTTTGTCTCTTTTGTAGTACATAGTATAGGAATAGAGTTGTGAATATATATATAA
AATATGTGTGTGTATATATACATATATATGCATATATGTACCTATATACATATATTATATATACCTATATGAACCTATA
TACATATATACACATATATGAACCTATATACACATATACACATAYGTACCTATATACACATATACACATATGTGTACCC
ATATACACATATACACATATGTACCTATATACACATATACACATATGTGTACCCATATACACATATACACATATGTGT
CCCATATACACATATACACATATGTGTACCCATATACACATATACACATATGTGTACCCATATACACATATACACATAT
GTGTACCCATATACACATATACACATATGTGTACCCATATACACATATACACATATGTGTACCCATATACACATATACA
CATGTGTACCCATATACACATATACACATGTGTACCCATATACACATATACACATGTGTACCCATATACACATATATGC
ATATGTGTACCCATATACGCATATGTGTACCCATATACGCATATGTGTACCCATATACGCATATGTGTACCCATATACA
CATATACGCATATGTGTACCCATATACACATATACGCATATGTGTACCCATATACACATATACGCATATGTGTACCCAT
ATACATATATATACCTGTGTACCTATATATACACACACACATATATATATCTATATACCTACATATATATACACACA
TATATATATACCTGGATCATTTTTTAAATGCTCAACAGTACACACATGTAACAGCATTTCAGTCAATGGTGGGACGA
TATTTGATGGTGGTCCCATAATATTATAACGGACAGAAAAATTCGAATCAGTGTGAGTCAATAGCACAATGCAATGCA
ATTACTCTTGTGTTTGTGGGCATGTGGTGTAAACAAACCTACCATGCTGTGAGTCCCATAAACATATAGCATATATAG
TTATATATTATACCTTAATAAATACTATGTGTGCTGGTTTATGTATTTATGTATTTTACCATTGTTTTAAAGAGTACTCCT
CCTACTTATATACAAAAGTTAACTATAAAACAGCCTCAGGTAGGTCCCTCAGGAGGTATCTAGAAGAGGGCATTGTCT
CATAGGAGATGACAGCTCCATGCATGTTATTGCCCCAGAAGAGCTTCCAGTGGGACAAGATATGGAGGAGGAAGATAAT
GATACTGATGATCCCTGTCTGTGTAAAGCCTAGGCTAATGTGTGTTTGTGTCTTAGTCTTAAACAAAAATATTTAGAAA
GTAAAAACAAATTAATAAATAAGCTTATAGAATAAAGATATAGAGAAAATATTTTTGTGCAGCTGTATAATGTAGTG
TTTCAAGTTAAGTGTATTATACAAAAGAGCCAAAAATTAAGAGAAAATTAAGAGTTGTATAAAGTAAAAAGTTACAGTA
ACCAAAATTACTTATATCAAAAGAAATAAAATATTTATAAATTAAGTGTAGCCTAAGTGTACAGTGTTTATAAAGTCT
ATAGTAGTGTGTGGAAATGTCCAGGCCTTACATTGACTCACCCTCACTCACTGAGTCACCCAGAGCAACTTTTCAGT
CCTGTAAGCTGCATTTCGTGGTCACTGCCCCATACAGGTATATCATTTTTTATCTTTTATACTGTATTTTTAACTGTACC
TTTTCTATGTTTATAGATATACAAATACTTAACCATTGTGTTATGATTGCCCCACAATAGTCAGTAGAATAACATGCTGTAC
AGGTTTGTAGGCTAGGAGCAATAGGCTATACCATCTAGGTTTGTGTAAGTACACTCTAACATGTCTGCACAATGATGAA
ATTGCCTAATGACACATTTCTCAGAACTTAGAATAAGCAATGCACAACTCTGTGTCAATTTGCCTCTAAAAACCCAGCT
GTTTATACTCTTAAATATTGTTACTATAGCTGTGAGTATCACACTCCAATCTAAGTGAATGTCAATGAAAAACATT
GAGTCATTTTACTATAACGGAAATGAAGATGTAATTTCTGAATTTAACAGTCAATTTAGGCTCAATGTAATATTT
TCAAGCTACTTTGAAAAACATTAACCATTAATAAATAAATATTATCATGGGTAGCATTCACTAAGATGCATCAGGTTTGTAT
TTATGATATATCTCTCAAAAACATTTTAAATTCCAAATATAATTAATAAACCATAACAGTTTCTAATATAAGTAATTTTC
ATGGGGATTATATTCTGATTAAGGACTAGATGAAAACATGTGCTATTTAGGAATCATGGTGACTAGGTAATACTCAACTG
AATGTTCCAGCGTGTATATAAGCGAAATTAGGTAGTAGGATCTTTTAGGAATCATGGTGACTAGGTAATACTCAACTG
TATAATTTTATAATTCTGTATACACATATGTTTAAATTAATAAATTAATAAATTAATAAATTAATAAATTAATAAAT
AATCTTAACAACAAAATAAATTTCTTTAGGTGGACTTTTCAAAAGGCCCTTTTAGGAGACTTTTAAATAAATCTTAAATGTGT
TTAGGAAGCTAAATAAGTGATTTTGGCCATATTTTTGTGTTACTATAAATTTCTCTTTATCAGGCATTGGCATTAGATG
TAAAGTTGCTCATATTTAAAGTAAACATTTGCTTTCTGAGTCATTATTTCTCAGCAACTGTAGTTGTTTTTATGGTT
GTTAAGAGAAATATAAATTTGCAAGTCATAGAAGGGGAAAGAAACCATTTGTACCTATAAAGAGAAATACAGCCACT
TAGAGTTTGTAGAGTAAAAATACACATATACACACACAAACAACTGAGTAGATTTTCAAAGCCATTATTTAGTGATTTTC
TCTTTGAGGTCTCTTTCTCCCTCGTTCATCTCTTACTTCTGCCCTGCTTAGCTTTAAGGTTATCTTTTCTCTGTCT
CTTATGGTAATAATACCCGAGAGAGCATTGCTGCCAGTCTCCTGGGAACTAGGAACCCAGAGGAGGGCTGTAGGCAA
AGTGTAATACCAGAAGGTGGGGAGCAAGTTTCTGGGGGAAATCATCTGAGAAGCACACCAGGAAGTGTGCTGGAATGT
TTGGGGAAGACCAGTCAGCCCTAACCTTCAGCCATGTCTGTGGCATAACTGGCTGTTGCCCTCTGTGGAAATCATGGGA
GGTGGAGGCGCTGCAAGTTGAGGGTGTCTGTACCATTTGAAAGGCATAGTTGGCTTTCCACGAAATCAAAGACCTGAG
GAAGATTTTCTTTTAAAGAACATGCCGATTGGCTTGTGATGTTAAGGAATTACAGGGATTACATTATGACAATTGGC
ATTGAGAAAAAGTGAAGAAACCTTGGATAACCTTGCAGCTTATTTATTCACGTGTGCTTTCCCATGACCATTGACATTT
ATCTTAAAGAGAAAAAGATGTGAAGCCTGTTCTGACGAGCTGAAGCCGTTGCTACTGATGGTAAATCTCTTCTTAAGAA
GACATGGTCTTTCTTGCAAACCTTGGCAGAAATGTTGATAGAAGAAATTAATAAATTAATAAATTAATAAATTAATAA
AATGAAAAATCATGGCTTTGATTTTTTAAAAAATATTCTTTGTGTAAATTTCTTTATAATTGAAAAGCTCCTATGTATTC
AGATAACTAAAGGAGTTTTCAGCACTTTTTTTTTCTTAGATAGAAAGCTACCAAATTTGTTCTTCAAGTAGCACTTTTCAG
GAAGAAGCTTTTACTATCTCTAATGTAGCAAAATAATGTCTTTTTTTTAAATGTTTTGCTTTTTTAAAAAATCATGTTTTT
AAAGCTGCGATTTCATTGATATTTGAATCACATATTTCCAGGTCTTCTGGTCATTTGATACTTGACCTTAGTTATTC
AACCTTTTTGACTTGGAGACTCTATTAATAAGTCATATGGTTATAAAGGCATTTGGCATTTACAAGTAAAAAGTAATGA
CTAATTAAATTTACAAAGTGATAACAACTACAGTCTATTTAAGATTAGCAATTAGAAACAAGTTCCAACCTTGCTGCTG
TAAGAAAGTAAGGTAGATGCTACATGGGTAAAAACAGGAACAGAAATTTAATAATTTCTGTGACTCATAAATAGGAT
TCAGGGCCTTCAGAAATGAAGGTATTGGTGGTATTACGTTAGGCCACCATCTGAAAGGCATAATTTTAGGTAACAGATA
GGGAAATGTATAGATCACTGTAAAGATTCTAATTTAAATTTCTTTTTTACTAGACTTCAATTTTATACCATCTTAACAC
ATCAGTCTCTTCTACTGTAAATAAGCAAAACAGAAAAATCATTTTATGTGCAGTTTAAAGGACATAAATACTCTCCAAG
TATTTTCAGATGAGGCACTTATTCTCAAAAGGAGATCTTGAAAAGTTGATCTGAGAAGAAATTACATGATTTTCATTTTGG

191/375

ATTGAAAGTACCCCCGGTTACATAATTATTCTTTGACCTTATTTCAGTATGTTCCCTGCACCACAAGTGTCTCTCTCTCT
GTTCAATTCCAACTGTGAGCTCTTTTAATAAACCCCTACTCTTAAACCTCATTTCCCAGGCTCAAGTTCCATATGCCTCC
TCTGGACATTTCCACGTGGAAGATCCACTCTTAATTTATATTTAACACGCACAAAACCAAGCTTACTGTGCCCCCTTT
TTGATTTTTCTACTTCTGTTTATCTGGCCATTATCTTCCAAAAAACAGAAAAATCATATTTGACTTCTGCCTTGCC
CTCCTTCTGCCTAGGCCTATGGATTATTTACCTATTATCTCTTGCTGTTCTGTTCCCTCCCAATACCACCAGGTATTT
TAATACTTAGATTTGTGTTTGTATCTATTTCAATAACATTCTAACTTGTCTTTGTGCCACTAGCTCCTTCCCACTAAGGA
TGTCTACTTATACTGTCTCATTAAATTACCCTACAGTTCTGCTTTGATTGTCCACTATCTATAGCAGAGGTGAACAAA
GGACCAGAAAATAAATATTTTAGGCTTTGCGGACCTATGGTCTCTGGGGCAACTATTCAACCTACCACGGTAGTGCA
AAAGAAGCCCAGATATACAAATGGACATTAGCATGTTCCAATAAAACTGTATTTGCAAAAACAAATAGGCTGAATTTTCG
CCCACCTGGCCGTAATTTGCCGATCCCTGCCCTGTAGGATAAAGTTTCACACCTTTAACATGGCATCTAAGCATCTGTCAT
CAGTTCTGCACCTATCTCTGCAACCTATGTGTTATTGTGTCTCTATGGATACTTCACATCCTTCGTTTTGAAGCCGAAT
CTAGAGCAGGGTTGCTCAACCTCAGCAGAACTGATGACTGGGCCAGAATGATGCTTTGTGGTGGGGGCTCTCCTGTGCA
TTGTAGGAGGTTAAGAACATCCCTGGCCACTGCCCACTAGATGACATTAATTTCCACCATGAGGTGAAAAATTCAAAATG
TCTCCAAGCACTGCCAGTTTTCCCTTGTAGGGGACGAGGGATTGTTTTAGTTAAGAACTACTGCCCTAGGGAGTAAAT
TTTGTGAAGGGGAGAACCAGTTCTACCTCATTACAGGTGTATCCCTAGCACCTAGCACAGTCTTGTGATATACAAAGA
GGTTCAGGAATCTATTGCATAGTCCAACCTCTGCTACTCAGTGGGATCCTAGGGTTATTTAAATTCACAAATCACAA
TTAAGTTCATCTGTAAGTGGAACCTATTACTAATTCATACATGTTTTCATAAAATTAATTTAGAAGTTCAAATGATATATTT
AACAAAAAGACCTCTTGAAAGACAGTAGTACTTTCAAATAAAAGGTAACATACAAATGATAGAACACTGAAGGTGATC
TGAGCCCTATTGAAATCTAGAAGCTTAATTTGACTCACATACTCTGTCTACACTGTACAAATTAATATATGGGATGTTAT
TGGGGCATTGTCTTTGTTCTCAAGGATTATGACCTAACAGGTGTTAGAATATGATTACTCAACCATAAAAACAATAGTTG
CCATAACTAAGCATAAAGAGTGGTTGGAATTTATGGGAGGGAGACATTGTATCTGGTACTAGGAATCACTTAAGACCTC
ATGAGTGAGATGAAATAGTCACAGAGAAGTCCAGGCACCTACTGAGCATTGTCTTAGATGATCTCATTGAATATTCA
CTGCAACTTGATTAGGTTTAGGTTTTATTATCACATTTCAAAGAGAGAGGGGCTTAGGAAGGAATTTGATATGAATG
TGAAGCATGGGAGATTTTCAGCAGGGAGAGAACTGCAGTGAAGTGTGGAAGGAGGGGAAGTGACAGGAGGTGTTTTCTCA
CCAAGGGAATAGTGTGAACAAATATGGGGATTACATGGGGTTTAGGTGAGTTTGAGTGCTCTAGGGGAAGGTAGGTTGG
AATCAGATTTTGAAGGATTGCTAACATCTCTCTCTCTCTGCTCTCGCTGCTCGCTCGCTCTCACATCACACAC
AC
TAACAGCTTCACTCCACATAACAGGAAGTGACATTTTGAAGTTCTTACCCCATGCTAAGCTTGCTAAGCCACAAGTATGT
GCACTGAACACTTTCAATAGTTGGACTTTGAGACTCAGTTCAATTAGACCAATCTATACCATCTTTCAGCTAGCTACTG
CTCTTCTACTTTTCCCAAGATAATCCTTCTGAAATAGATACACAATGCTGTTTTATTCAAATCAGATGTGTTAATCT
ACTAGTGGCACTTGTGTTCTGATGCATAGAACAGAGGCATTATTTACGTGAGGACTGTGCCTTCTTCTACTGAATTG
CAAAAGTATACAATTCTTAGAACACATCTAGCAGTCTCTGAGGGGCTGGACACAGAAAACCATTTACTCTGAAGGTAAT
TTTCTCTATTTTATCACTAGCTCACCAAGGTGAGAGTCAAGGAGTGAATATCTTCTTTTCACTCCATTCACAAAA
TAGTTTGAGTGTTTCTGTGTACCTATTGTTCTTGGAGATAGAGAACTGAATGAAATAGACAGTCTTCCATACATTG
GGGCATACCTTTTTTTTTTTTTTTTTTTTTTTTGGAGACAGGGTCTTACTCTTTTGTCCAGGCCGCTAGAGTAAAGTGGCA
TGATCACTGCTCACCTAAGCCTTGACCTCTTGGGCTCTGGGTTCAAGAGGCCTCCACCTCAACCTCTCAGGTAGCTGG
GACTACAGGCACATGCTACCAGGCCTAGATAACTTTTTATTTTTTTGTAGGGATGGGGGTCTCACTATGTTGCCCAGGCT
GGTCTCAAACCTTCTGGGCTCAAGCCATTCTCCAGCCTCGGCCCTCCAAAGTGCTGGGATTATAGGCATGAGCCACTGCA
TCAGGCTAAAGAGCACATATTCTAATAAAGGAGAAGACAACACACAAATAAATATTCAGTGGGTGAGAGAAAGACAAG
TACAGTATAGAAGAATAAGTCAGGGTAAGGAGTTACAGAGTTGTATGTAAGACATTTTCAGCAGAGATCTGAAAGAGATG
ACTGAACGAGCTATATGATTATCCAGCAGAAGTACATTTCAATGTGATTTCAGTACGCCAAATGTGGTTGGCGTATTT
GAGGGAGGGGGGAAGTTATAGAAAATGAGGTAGGAGCCACAGAAAGGCATCAGATCACATAGTGCTTTGAGCCTGTAGT
AAAGACTTGGGTCATTCTTGGTGATGACTGTGATGTATTGAAGCAAAAAGTGTTAGTAGTAGGAATGTCGTGTGTAGG
AAGGGACACAGTCTATCATAAGTTTGAAGAATCATCCCCGCTCCTGTGTAGAAAAGTAAAGATGTGGGGAAAAATGGAA
GCAGAGACCAGTTAAACTATTGAAGTAACCCAGGTAACATGTATTGGCAGTGTGGACTAGAGAAATAGAGGTAAAGTA
GTTAAAAAAGAGGTCATAATCTGTCTACCATTTGAAGACACAGCCAACAGAAATTTGTGGATGCTAT
GGATGTGAAGAGTGAGAAAGAAGATCAAGAATAACTCTTAAGTTTGTGGACTTAGCAACAGGTAGTTTAAATAATTTATTT
TTTGTCAAGCTGAGGAAGATTGTGGAAGGAGCATTTTAGGGGAGGTGGATCAGGAGTTTATTTTAAAAAATTTATTT
TGGGGATGCCTCTTAGATTTCTGCATGGAGGTTTCACTTAGATAAGTGAATGTATGAGTCTGAAGTTTGGAGACAGAT
TAGCACTTGAGATGAACACTTGAGAGTTATTAATAATGTAGGTGTTATTAAGTGAATGTAAGTCTGAATGAATCACCAGG
GAGCAAGTATATATAGAGAAAAGACCTGAGACAGTTGGGGCACTTTAAAAATCTAGAAAATCAGGAAAATGAGGAAAATC
AGCAGAGAGGCCAGTGAGGTTGAAGAAAAATGAGAGTGATATCTGGAGGCCAAATGAACAAACTGTTTCAGGAGAAAT
AAGTGGCTGGGCATGGTGGCTCACGGCTGTAATCCAGCACTTTGGGCGGATCCCTGAGGTGAGGAGTTTGGAGACCAG
CCTGGCCAACATGGCAAAACCTCATCTCAAATAAAATTAACAAAATCAGCCAGGCGTGGTGGCAGGCACCTGTGATCCC
AGCTACTGGGGAGTCTGAGGCAGGAGAAATCATCACTTGAACCCAGGAGGCAGAGGTTGCAATGAACCTGAGATCATGCCA
CTGCACTCCAGCCTGGGTGACAGAGCAAGACTCTGTCTCAAAAACAAAGAAACAACAACAGAAAAGTGATAAACTG
TGGCAGATGCTGCTCATAGGTCAACTAAAATAAGAACTGAGAATTGATCATTTGCATTGGCAACATGCAGCCAATTTGGTG
GCATACAAACACAAGTCGATCAGTAGAGTAGTGATGATACAGGACTGACTAGAGTGGAATATAACAAATTTCCCAATGC
TTAAACCAACAAGCATTTTATTATTGCATACAGTTTCTGAGAAATCAGGGAGCAGCTTAGCTGGCTGGTTCTGACTAAAG
TTCTTAGAAGAAATTGCACTCAAGTTGTGAGTGAAGGCTATAGTCATCTGAAGCTGTATCTGGGACTGGAAGATCAGTT

TTCTAAGATGGTGTCTGTCGCGAGGCAGCCCTTGCTTTACACTGGCTGTGGCAGAAGACTTCAGTTCTCTACTGTTTGTG
CTTCTCCAAAGGGCTGGGTGTTCTTTTTTGTGTGTTTAAATACTTTAAGTTCTAGGGAACATGTGCACAGCGTGC
AGGTTTGTACATGTATACATGTGCCATGTTGGTGTGCTGCACCCATTATTAACCTCGTCATTTACATTAGGTATATC
TCCTAATGCTATCCCTCTCCCCTCCCCCACCCACAATAGGCCCGGTGTGTGATGTCCCCCTTCTGTGTCCAAGTG
TTCTCATTGTTCAATTCCCACCTACAAGTGAGAACATGTGATATTTGGTTTTTGTCTTGGGATAGTTTGTGCTGAGAAT
GATGGTTTCCAGCTTCATCCATGTCCCTACAAAGCACGTGAACCTATCCTTTTTTATGGCTGCATAGTATTTTCATGGTG
TATATGTGCCACATTTTCTTAATCCAGTCTATCATTGTGGACATTTGGGTTGGTTCCAAGTCTTTGCTATTGTGAATA
GTGCTGCAATAAACATACATGTGCATGTGTCTTTATAGCAGCATGATTTATAATCCTTTGGGTATGTACCCAGTAATGG
GATGGCTGGGTGTTTCTACCTCAGGCACAGGAGTCAGTGATTCAAGAGAGTGCAAAGTAGAAGCCACAACGACTTTTAT
GACCCAGACTTGGCAGCAACACACTATTACTCTGCCATATTCTTCTGCTCACATGTGCCAACCCCTGTACAGTGTGAGA
GAGGACTACTCAAAGTTGTGAGTATCTGGAGGTGAAGGCCTCCTTATAAAAGGACTAAGTGGATTGATCAAGAGATG
ATGGGAAAAGAAGTGGTGGCAATTGTAACTCTTGGAGTTTGTGTAAAGTCAGTTGGAGGGGATAGGAAGAAAAATG
AGATATGGGCAAAGGGTGTGTTGTCAATTGTATTATGTTTGTGTGGTTTTGTAGAAAGAAGCAGCAGAAAAGGGGACATTT
GATCATGAGAACTGGGGACAATTGCAGGAGCAATATCTTGGAGGCTTTGGGGGAATAGGGGTAAAGGAGAAGTTCA
GATAGTGACAAAGCAAGGAGTTGCCCTTAATGGGAGTGCTGATTGTTTCAGTCCTCACAATAAATGAGAAAAGAAGTA
GGACAGTCTGAGAGTATAGGAGGTGAGTATCTTGATAGATCTGGTTTTCAGAGTGTATGAAAAGTGTCTCTTAATTCCTT
CTATTTTGTGATATAAAATAAAGCTCATCAATGTAAAGACAGAGAACAGATGTTGGAGGTTTGGAGAGAGAGAAGGTGA
GAAATGATCCATCATCTCTGGGAGGAGAGAGTGTCTTGTCTAGAGAAATGTGAAATTCAGACGGCACTAAGGAGCCA
CCTCAGGCCAGTAGTTACAAATTCAAAGTCATCATGGTTGTGTTTTCTCAACTATCATTGACTGCTTAGGCCACAAC
AAGCACGGTTTGAAAAAGGTTGGTTTAAACAGAGATGAGATATTTTCAGTGAAGTCTGAGTTTAAAAAGGATATGCAAAGA
AGTGATTATGCTGCCATATTTACTCTAAGCTCACTAAGGAAAAGGGGACATAAGTTTGGTGAGGGTCAGAACAACTTCT
AAGGTCAATGCACTGGAGGACTCATTTGGGTTTGAAGATTTTTTGGAGTCAGAATACTGGAGGGGATGAGCTAGAAAGAG
AGAAGGTAGGGAGAGACGCTTAACAGTGGTTATGGGGCACCGTTATCTGTCTATGGCAAGGCCTTGCTTATGGTAAGGAA
AGGAGGTTTCAGGTAAGATTATCTGAAGGGAGATCCAGAAACTGGGAGACCGTGGGAGGAAAAGATAAATTATGAGTTAT
GTAAGAGTTTGCCTGGAGAGAGACAGGGCTAAAAATGTTTAAAGACTGAGAGGAGAGACCTTTAGGTCAGTAAAAACT
GGATTAGGAGGGGAGCAGATTAATGATGTGAGTTACAAAGACATTTTAGGGCAAGGAAGAGATCATGGTCTGGAAGCAG
CAGAGAAGAATGAGAAAAGACTCCTACTTCACTAGGGGCAGAGGTACAAACATGTGGAAGGAAAAATAGCCACTGCATCA
GAGGGCTGAAGTAAATCCGTATTTCTCGTGGGCAGCCAGTGTGTCAGAGCAAGATGGTGCAGGAAAGTCAGAGAACAT
GCTGAAGATACAGGAGCATAAGGAGATTTTGTGATGACAGACTGAACGCTAGGAGTCACGCTGGCGAGTTTGCAGGAA
TTGGGGAAGGCTGGGGATTTCAAAGTAGGGGATTTACAGAGCCATCTGGTGATGAGCAATGACCTGGCAGTCTTGGACT
TTGTGTGGTGACGGTTTGTGATTCAAGACAAGGACCTTGGTTTTAAGACCATGTAGTCAGACAAGCACAACTCCTCTG
CTGGGATGGCCGTTTCTTTGGTCTATTTAATTAGTTCCAGAAACAGTAATTCATCCTCAGTGCATTTATAGAAATTGA
GGGGAGAGGTGGTGGGTACCAGACTGGCCAGGTCTGCCAGTCTCTTCACTTCAACATTCCTGTCTGGTAAAGTCATA
TTATTCTCACATCTTGGCCGTGTGTGTATGCTCCAAGAATGAGACAGATGACAGAAGATACAGAAAAACAATTGGGAAA
TTGCTAGTTTGCAGATGTATAGCCCTGGCACAGATTTTCTAATATGAAATTGCCATTTTTCATGATTTGGACACAAA
ATCCTGTTCTTGAATATGATGTTTCAGCCTAGATATTGAAGAACTGAAAAATATTTTTGAAAAATATATATATTGCATT
TGTCACAACAGTTTATACACATAATTATCACAATGATATTGCTTTTCTTAAATAAATAGGTTTTATGTGTTGGCATGAA
ATACTTTTACAAGATGATGCCAGGTTTAAACATTTATACAGGAATATTTTCAATTATGTTAATAAACAATA
TGAATGTATAGCTTCTCTTTGGAGTTTGAATTGTTGGTTCTTATGCGCTTGCATATTTATATTAGTTGTACTGG
CTGGCAGTTATTAGGAAATACGATCTTCTGTGCTCTAGGAGTGCGCCCTGCAAGCAACATGTGCAACATTTTTTTCTT
TCTTTCTTTTTTTTTTGGCCTAAGGAAAAGGTAACTCTGGCACCTTTTAACTGTAAGGATTATGTGGCTCTTGTGT
GATTGATTGGCTTGGCTTCTCCTCAAGAAATGCTCCTGGTGCATTTTTATGTTCTCACAGAGCCAGGGCTTTGCTGATC
AGCAGTCACCCCTGTCAAGACGTGGGCTTGTCTTTGTGCATTTGCTCTTGCAGCCTGGGAAGCATATTTCAACACACT
GTCCAGAATTGGCTAGAACATGCCTGTCACTCCAGCTGACTCTGATGACGCTCTTGCCAACGTAGATTTACATCAACA
CAGTTCTTTACTGGA AAAAGCTCATTGAGAATACAGGGTGGCCCATTTAAAGAGGCATAGCGTCAATTTGAAGAGA
AATATATTTTAAAGGGAGAACTCTAAGAAATACACAGTCAATTGAAGGCTCCATGGAGCATAGAATTATAACTAGCATC
ACCCGAGAATTTTTCCCCTGGAGATTGTCTAAGCTCTAAGTTCTAGAGACTGGCTTATCCTGAAAAGAGAACCTTTCT
GTTCTAGACTTTTTCTTTAGCATGCTAGATATGTAGGCATTTTTAGCCTCTTCTTTCCCTAACCATATAATCTGAACA
CCATATTCAATTGAAGAAAGCATGAGATGTGAAAGCTGATAAGATGCAGGATTATGTGACACCATTGCTTTTTACCTGTG
CAAAATTCAAGTTTGGTAATCAATGGAAATACAGATTTTACCCTTACATAAAATTGTTTGGCATATGTCCATCTTGTTT
TTTGACTCATCCTTGATATCACAATGAATGTTTGGGATAGGCATATTACTCAGATGTGTGGGCTATAGACAGGAAATC
AGGCATTACAGAAATAAAGCTTGTTACCATAGCTATCCAGGAAAAAATACAACACTGTCTTTGCTGTACAAAAGAAAA
TTCAATACTACTGTACATGATATGTGATTACTATTATTAGCCCAATGCTACTACCCTTCAATTTTCATCATTTCTAG
TCTATTTCAAGTCATTACAGTAATGGATACAACTGAATGGGTTTGAATTTTACCCCTTCTCTCATGACAACCAGCAGG
ATTCTCAATGACACATGCTTTGATCTGTCTGCTTTTAAATCTCTTAAAGCAGGGTGGCTCTAGATAGCTTCTCTCAGAA
GATTTTATGATTCTAATAGACCTCATGATGAGTTCTATATTTGTGCTTGTTTAGATACATCAAAGTCAGGCTTTTACT
AGGGCCACCTGGAAAGTTAAGGTCATCAGCTTTTTGTTATAGTCATTGGATTACTGTGATGCTCAGCAATAACAAAGTT
TGACCTTGTAAAGTGATCAAAAGTTGTGGGTTACAATATAGGAATATTAAAGTATATTCTGCCATGATGTGTCTTCTGT
TGAGTTTGTCTAGAATTAATATTACAGTCACAATTAAGTCCAAAGTGTCTATACTGCTTGCATACAGTACAGTGGGA
AAGAAGAGATGTCAAAATCAGAGAAAATAAGATTCTCCATTATGAATTAACATACAAAATCTACACTTAATGCATCAGA

Fig. 6.187

[illegible]

194/375

GTGCTGTTGTTGTTGTTGTTTTGACACAGAGTCTCATTCTGTACCCAGGGTGAAGTGCAGTGGCACAATCTTGCTC
ATTGCAACCTCTGCCTTTTTGGGTTCAAGCGATCCTCTCATCTCAGCCTCCCGAATAGCTGGGACTACAGGTGTGCACCA
CCACACCCAGCTAAATTTTTGTATTTTTAGTAAAAATGGGGTTTACCATATTGCGTAGGTGAGTCTCGAACTCCTCACT
TCAAGAGATCTACCTGTCTTGGCCTCCCAAAGTGTGGGATTACAGGTGTGAGCCACTGCACCCAGCCCTTTCTCCCTC
ACACTTTTGGAAAAATATTTTTCTCAGTTTGTGCTTGCCATCTAATTTATTACATTGCTTTTTAATATACAACATA
GACAAAAGAAATCACTTTTTCTTTTGGAAAATTTGATCTATGACTTTTCATTATATAAAAGCTTTCCCTCACCCCTCAGGTCA
ATGTTACCTTTATTTTTTTCTAGTTTTTTTTTAACTTTGTTTTTAATCACTGTGAAAATAATTGAAAGATGATATTTA
GATAAAAAATTTGTGTAAAGCTCTACTATTTTGATACAGATTGAAAAGGATAAAAAGAAATGAGTAAGAAGTATGCGTAG
TGTTTAGAATGAACATGAATGATAAACTAATAGGTATTATTTTACAAATTATAGAATATTAAGATAAAATATACTCTAG
AGTATAGAAATATATTTTATATTATTATGTTAAAAATATTAAATATTTTACGGCATGTAAAAATAGATGATAGTGTAGCCA
TTTATGCATCAAAGAGTTCAAACCATACAACACTAAAGGTAAACTGGGGCCCTAGTGTACCTTCCCAATTTCTATC
ACCTTTCCCTTCCACCCAGAGGTAACCTACTATTATGTGTTTACTTTTCTTGAGTATGTTCTTGAATAGGTGTGATTCA
AAAGAGACAGTTCCCTTTTGCACCTTTGGAAAACAAATAATTCTGCCTTCCCCCATGATTGCATTTTATATGTTTAC
TAAGATATTTATTATAATAAATATTACACCACTTTTCTCTGTCTATTCTAGGGGAAAGGAACCTTTTTGTTCAAAAT
TTGTCAATCTTATATTGTACTGCCCCATATTCTGCAATCTGACAACAGAATACATTGTATGACAAATGTGATGTTTG
TACAAATATGTACAGCTTATGTATGCTGTTGCATGTGTTGCTCAGCATTGCGTGTATTACTGAGCATTGCATGTATCACT
TAGCCTGTCTATAAAAAATTGAGACATTTATTTAAATAATAATTGTCCCACAATCTATTTCATGTTTATGTCATGTGATA
TTTGAAGCAAAATATGCCATAGAAACAGTATCTCTGTCTCAGTGAATTTTAAAGTATTTTAAACATCAGTAGCAAGTGCA
TAATAAATCTTTAATGTATAATACGAACGTGATAGAAAAATAGGGCTCTGCATATTTTTTCTTGAAAAACAAATGTGTTT
TGAGAAATATAGCTTTGTCTAATGCTGCCTTTGTAAAAACCGGGAAGTCAAAAGACAAATAATATTTGATTCTATATGT
TATGTTGATTATATATAGTATGTATGTGAATGTGCATAACTATATGGATTATATATGCACATATATACACATTCACTT
ATACTCATGAAAAATGGTAAAAATCCAGCTAATGATTAAACATTGGGTCAATAGCAATATATAAAAAATAATATTAAACA
TTCAGATCTTTGCAAAATCTAAATGGGCTTGTTTTTAATTTTCATGTGGACATTGAAATTTTATAGATAAGACTAACA
ATATGTTTTACTGTACTGTGAGAATTTAAGATTAATGAAATATTATGTTATTAATTTCTTACATTTGTAAAGTTGTTTT
TCACAATACCGTGGCCTATTAGATTGCTAAGAAATTATGTATGTCAACTCTTTCTTTATACAAATATTGAAAATGATAG
TAAGATTAAGGAACCTGCCCAGGTCACAATTTTTTTCTTTCAAATTTTCATGGCTGATTTCTAGGCAGAAAATTTTCAGGGG
CCTGTCCAATACGCATGAATTACCTACTATAAAACAAAGCTAGGGAATTTAATACATACCGAAAGGCATTTTGTAAATAT
ATCAGAACTATACAAAACCAAGAATAGTCATAAAAAAACATTTTAAACATTTTAAAAAAGATTATTTCCAAATGCCCT
CACTTCCAGGAATGCGACTTTAAAAAGCCTAGGCTTTATGTTATGTATCAAGTCAATTGTACTCAATTAGACAATAGTG
CTATAATTAATTAATGTTATTTATGTAAATGCAGAAATTACCAAGAGAATTTCAAAGAGTATAACAGTATTAAAGTCGTT
TCCTTAGTAATTTCTCATTGCTGTGAAAAACATCTGTAACTTAATACATTTATATTCAATTTTATATTATATATGCA
CATATTATTTTTAAATATTTGTTAAACAGGTAATTTTCTGATTACCAAGTAATACTTTTGTATTAAATGTTTGAAGACT
GCCTCCAAAATTTGCAAGAAGAAAATTTTAAACCGTTATAAATCCTTACCCTTTGAAATAAATTAATTTCTTCAAATGTTAGA
TATTTGGAATGTTTCCAGGTGTTTACTGGTATAGTTAATGCTGTGTAACATCTTTTATTGCACATACCTTTTAACTC
TGTGGAATGATTGCTTCTTTCATGATTCTCCTATATTTTGTCAATCAATTTCTTTTTTTCTTTTTTTTTTTTGTG
AGACAAAATCTCACTTTATCACCCAGGCTGGAGTGCAGTGGCATGATCTCGGCTCACTGCAACCTCTGCCTCCCGGGTT
CAAGCAATTTCTCGTGCCTCAGCCTTCCGAGTACCTAGGATTACAGGTGTGCACCACCATGCCCGGCTAGTTTTTGAATT
TTTAGTAGAGACAGTGTTTTCGCCATGTTGGTCTCAGGCTGGTCTCAAACCTCGACCTCAGGTGATCCACCCGCTCAGCC
TCCCAAAGTGCTGGGATTATAAGAGTGTGCCACTGCACCCGGCCAATTGTAAGAATTATTTTCAAAGGAATTTATATCA
AGTTACAGTGCCCCAGAATATTCTGTTATTTTAGCTGTATTGAATATCATAATTTCTTAAACATGTTTGTCTTTAGAT
GGTATAAAATACTATCTCAATATTATTTTCCATTTGTTTGTGTTTACCCTTTATATTTCCATTTGCTTGAACCTCTCTGCTG
GAATCTTTCAATATCTACCTGATGAATCAATGTTTATCTGTTGGTTTGTGTTTTCTTTTTTTTTTAATTAATTAATTTATTA
TTATTATACTTTAAGTTTTTAGGGTACATGTGCACAATGTTATACATGTATTTTATTTCTTTTGTGCATAAATTTGAC
TCTTTATTTTAAAGCAACTATTTCTAGTCTTTTGTGTTCTCTGTTTTATTAAATTTTTATTGTAAAGAAGTTTTGTTTTG
GCCAGGCATGGGGTGGCTCACACCTGTAATCCTAGAACTTTGGGAGGCCGAGGCAGATGGATCATTTGAGACGAGGAGT
TCAAGATCAGCCTGACCAACATGGTGAATCCCGTCTGTACTAAAAATATTTAAAAATTATCTGGGTGTGGTGATACAT
GCCTGTAATCTCAGTTACTCAGGAGGCTGAGGCAGGAGAATCACTTGAACCAGGGAGGTGGAGGTTTCAGTGAGCTGAG
ATCGGGCCACTGCACCTCCAGCCTGGGCCATGAAGCGAGATTCTGTCTCGAAAAAAAAGTTTTGTTTCTGTGATAGAT
ATTTTGCTTAGCATGCTTGCTTTTTATATTTAGAAAAACTAAATCTATTCCATCTAAAAATATATTTTGGTGAATAACGC
AAGATATGTAATCTCAGTGTTATTTATAAAATGTACCATTTCTCACTTTCTTATTTTGTAAAGCTTGTTTAATTTTCAGAG
TTTGATATATTGAAGAGTCTTATCCACTGACTTAAAAAATTTGAGGCAGAAGGATCCCCCTCAAGTGTACATCTTAGA
ATTTGTTTGTATGTTACTTCAAGGCAGTTGGTGAATAATTTAGAACTCAAACCTTTGGGCTGCAGATTGCCTGAATACAAT
TAATAGAAAAACAAAATATTTCTCAAATTACATTCTTTGACATTAGTAATCATTCTTTTATATACATCTCAAGTCTAAA
CTCCCAATCTGTTTTATATGCAGAGATTCACAGCTTTAAGATTTATGTTTCATACTGCAATATCACTCTATGATACATT
AATGGGATTTCTGTACTCAACTATTCCATTGGCATTCAAGTGAATAATTTTTATACAAAACCTTCTTCAGGAGACAGGCCC
AACTGAAGTGTATCACTTTAAACAAATATCCTATGGGCAATAGATAAATCTGATATTTTTCTGAGTAGAAGAAACATA
AAACCTCAATATAGGATTAATAGGGTTCAAGGGTTTTATAAGCACAGTGCTTGTGAAAGTATGTAATTCCTATTAAGG
CTTGCATTATGAGCACATCATGGTATATGCTCTCTCTGGGAATATGTAAAGCCAGTTTAAAAATCAATTACAGACATT
GCAGTCTAGACCTCCGCAAGCCTTTGCACGTGACTGGACTCACTCAGGTTAATCTCTGAACCAGTTGTAGAGAGCTTTT
TTCATCTCTCCCTCACACATTTCCAAACTCTTTCTTTCTGTGTTTTTTAACTGTGACTTTTCTTTACAAAAGGAAAAG

196/375

ACTCACAATTAGGTTTCTATTCTGGGGCTATTTTGTACATTTGTGTACAAAAGACTGCATTTTAAAGGTGTCTGACTTT
TGACTTGGTTTTCAGAAGGCATAAGAAGTTGGTTTTCATGGTTACAACCCCATGCCAGAAAAGTTAAGAGTGGTATTTTT
AATTAATTTGTAAC TAGAATTAATATAGCTAGAATTATATAGGAATACAACAAAAGATTAAGATGTATATACATCCCT
CTGAATAATATAAATATTGACAGGCTGATATTGGGTTTTCTAGACTTACTTTTCGTAGGTATTTTCTTAGTATGAAGATA
GTTAAATATACTAAGTGAAAAAAAATACTCAAGTCACTGTATTAGTGGTCCACTAGTAAACTACAGACCTCATCT
GTTTCTGGAATTTGCAATTTTAAATATTGATTTTTGGAATGTGGCGACTTACACTGCCTACTTTTAGTTTGCCAGGTGA
GCTCATTTTTTGAAAATATCCTATACTCTGCATTTATCCTTTGATAAAATCATGGCTATTATAAATTTTAAAAATGGTAA
AGATCATGTCAGAATAATGAATCGTGCTTCTAATTTGATAAATGTAGCTTAATCACAAATATACGAAACTTTCTGTTGG
TCTGGTGCAAACCTTTCTCAAGGAGAAGATTTAGTGTTCAGAACCATTTGGAGTAGATGCTATATTAACATTTGAGGCTC
TCTCACCTTTAACTTTATAAAGCTAAATATAGTCAACAAATGAATTGGAAGACATATTAGTAAACATTTGAGGCTC
GGCAGGCCTATGTGTGAGGCCAAGATGCTTCTGGAATTATTCTGTTTCAAGATGATTCTCTTTCTTTCTCATTTCTCTA
AAGATAGGATGTCAACAGTTTCTTCATAAATGTAAGTTATAAACCATGACATTTGTGAACTATTGCAATAATCTTGG
GTTGTGTAGGGATAGGATGACATTTTCAGAGGAAATCTCTAAACACTTTTCACATTTATATGAAATAACATATGTACTTG
TTATAAGCATAAGAAGTGGATCTCATATAAAAAACATAAAATATTTTTTTCACATTTATATGAAATAACATATGTACTTG
TAACAAC TGAGAGTCCCTGATCAAATTAGGAAATCTACAGCCATTTATTTTAAATCTTGCTCTACCAAAATTTGGATTGA
GAGACAAATTAACAACAATCATTAGTTACATTTTATAACTATAGAGGATGTGCAGAAAACAAATATTCAAACCCAAAT
TTATGTACTATATTGTGCCATATAGTACAGGAAATCTGTTTTCTTCTAAATTATTAATAATTTAAAAATCATGAATAA
TTGTTTATGTAAGACAGCTGGCCAGGCTATTAAGGGAGTACAGCTACACAGTAACACCAAGAGTGAGGTGTCCATCTGA
GCTACCACATGGAGAAAAGAGCAGCTGGCTTTGCCCCACCATATTCAGTTGAAAGCTGCTTATTACTGAGCATTGTGAATA
ACTTGAAAGGAGAGAAAAGGAAAGAACACGTCAGGGTAGAATGTTTACTTGTGTTGAGCCTCCCAGGAGAAATGCCATA
CAAAGATTTGACTTGATTTTTAAATCAAACCAAAGATCTTTCAGATTACATTTGGAGGGCTGAATTGAAAGTTAACATTG
TATAAGTTGTATTATTTTTATGTTCTTTTGTATTATACTATGTTCCCTTTTATATTATGTTTCATATTACCATGAACCTT
AGAGTCGGGATAGATCAGAGCTCAAGCTTAATGTCACTCTTCCAACTGTGTGACCTGGGAAAGACATTTAACGTGT
CTAAGCCTCAATTTCTCATCTATCAAATGGGGATAATATGTTTACTGACTACAAATTAAGTAAAAAAGACCTACAAA
ACTGGGTGCTACTGTATGATAACACAACAGTTACTACAGATGCTATTATTATTAGGTACAGTGTGTGAAGAGAAAGTAA
AAAGAAGACAAGATGCAAAGATAAAGAGGCAAAATGCAAAGATCCTATTTCATGAAGCCAAATAGTAGTCTTTCAAGT
TGCTGTTCTTCTTATTCTCTTCTTCTTCCCTCCAATAATAATAATTCCTATTGTCTACCAAGTATTGAGCCTGTCTAGGT
CAGACACATGGCATGCATTGAGAGAAAGAGAAATCAAATTTATCTCTTGAACCTTTTGAGCACTCTATCAATGGGTCTT
ATTTGGTTCCATGTTACTGCTGAGTAAAAGAACATGCTCAGAGAGGTAAGAAACCTGCCACCAGCACCTTACCAGTA
GACATTAGAGTCAGGACTTTAAACAGGCTTTTGGACTCCAGAAACCATGCTCTGCCTACTCAAATTTAGTAGCTGTTCT
GAGGATCTCATTTCTACTTATTTCCCTTTTTTATTGTTTGTGTTTATGTTCTAACCCTGATTTGAAACAAATCTCAG
ACCAGAAATTTTACTCCTGTGGAAAGAGTAATTTGGATGTTCTCATTACAATATTTTTTTCTTCATGAATGTAATCAA
CATCAGCTGGAAGCTTTGCTTTTAAATGCGTGGATAAACACAGCCACACATTTTATTTCCCTGAGGCGTATTGCTGGGAA
AATCTATTTCTGATTTTAAAGAAATCAACATATGCTGAACCACTGTCTATTTTCATTTAAATTGACAGGAGCTGAGACT
CAAAAATTATGTTGATTTTCCACTTCTAACATTTGTTGATAGAAAAGTTGAGGTAAACACTTTATTCTGCCTTAGATGC
CTGCTAAATTAGTCTCTCTAAGTAAAATGTGAGGAGCTATTGTTGGATTAAATTTAGGTGGAGTTGATACAGTTTATG
GGAAGAACCCTTCTACAGTATGAGAACAACCTTTTAAATATTATGTTAGTTATAATCTGGAGCATTATCATACCTTATTA
TATATCGTATGTTTTGACTTTCTCCTCTATTGGGCTGTGGGCTCAATTAAGATAAGAATGTATCTCCCTTATCTTTGTA
TATCGGTGCTTAGTGATTGCTTGGCACATAGCAGGCGCTCAACTCTGTTGAATTAATGATCAATGAGTTAACTAGA
TGGCTATATAGTTGATCTTCTATATAGTTGATCTTCTATATTCAAATATAGTTTACATATATGTATGCAAGTGTATAT
GTGTGTTTATGAATAAGAAGAACTATATCTTCATACTGTTGAAAAGTTATATTGTTTCTCATACAGATTTTATTCCTTT
AGCTAAAGTTGTATCAATATTAAATTTATAACTAAAACGATATTACGTTGGCACATGAGGGTTTGTAGTCAGCTCCAGCT
GCTACAACAAAATACTATAATCTGGATAACTTACACAACAACAGATTAATTTTCTCACAATTTTGGAGGCTGAAAAGTTC
TGAAATTAGGGTGCCAGCATGTTTAGGTTCTATTGGGGGCCCCCTCTCCTGGCTTGCAAGTGCCTTCTGACATGGTG
GAGAAAGAGCAAGCTCTCTGGTGTCTTTTCTTATAAGAGCACCAATCCCATCATTGCAGGCCCCACCCTCATGATCTCA
TCACCTCCCAAAAGACCCATCTCCGAATACTATTACATAAAGGGTTAGGGCTTCCACAAGTGAATTTTGAAGGGGACAT
AATTCAGTGCATAGCAATGAGTATCTTGTAGGCTTATGACCATATAATTTGAAGCTATGATTTATGTAGAAGTTGGACA
AAAATGTTTTCACATAATTAGTTATGTTTACATGATCTAATGCCTGAACTCATTTTAAATATGCCTGAAACTCATTTG
TTAAATATATAGTGTGGGAAAAGAGCATTTAATATTTGTTAGCATTGAACTTAAAAAAATTAACACATTTGACTTT
AGAGAAATGTATATGTTGAAGAGTAGGTGTGGATGAAATGAAAGAAGAGAGCTAACCCCTTCTCAGTGCCAGACACAGTG
GTGTGGGCATTAATAATTCAACCCCTCATAGCAGTCCTTAGGGTGGTCTTAACCATTTTCATGGGGAAATTTGAGACTCAGA
AGTTTACTAATTTGGCCAAAGTCACATAATTGTTTAGAGACTGATTCAAATCAATGTCTTCTTTATTCCATCAATCTT
TTAGGGACCTTATCTGTTATTTATATGAAAAAAACAACCTAATTTAATGTTTATGGAGTTTGTTTAATTAATAAAGC
CCTTAGGATTTCAAATTTGTTTCTAAGTCCAAGAGATCCCAATGAGAAGGAACACAAAAGTAATTTTAAATGATTTAAAG
TAAATGCTTTAGACTGAAATGGTAGCTTCTTTTAAATAACATTTCAAATTAGGTTTACTATTAACATTTACAAAGAAC
CAGGGCTATAAATCACTTTTATATGCAGTGCAATCCATTGATCTTAATAGTTGTATTTGCAAGCTGAGTAGAAGAGATT
TACAGTTCTCTCAAGGGATAGATCTCCTTTTTTGGGCAATGAATATACTCCTTCAGAAAGTCTCTTGCTCTTTTAC
GTACTCTTTTTTGGCTTGGTATTTCAAAGGCTTTTTGTTTATACTTTAAAAATATTCAACAAAAAGTCACTGAATATTCTAC
AATGTGTTTATATCTTGGGTGTAATGCCTAGGTTAATAAGATGCATAGAAATATGGACCCAGTGCTACAGGCCAGCAG
TGAGCAAACTCAGGGAACAAGTGACACTAAACAGTGTGGAGAATGCAAAGGCTAAAGGCTATATGAGTCTTGGCATG

197/375

AGCACGGAGGTATGGGCTGAGCAGCGCTGCCTGAGGAGGTGATGTACAAGTGGGTATTTATCCCCCCCCGGGCAAACCAG
AAGGAAAGGTAAAGCCAAGGAACAAAGTAGACAATGGAGATGGTGGGGAATGGAGGGAGAAGAGGAAAGAATCTTGGAG
AGATAGTCAGTCTTAAGGTCCAATTAAACTATTTTCATGGCAGCCATTATTATCCTGAATTTTATGGATGAAGAAGTGAG
GTTCAAAAATATTACATAACTTGCCCTGTGTGACAAAATAAATGAAAAGCAGAGCCAGGTTCAATGAAAAGTATGTTTGA
CTTAGGTTTTTAAATTTCTAGTCATAAATGGCAATTTAATGTTGTTATATATTTGTATTGGGCTTCAGCAAAAAACAAAA
TAAACCTCAAGTACACAAAAGCTCTAGTAATAGAGCCATGTTTGTGCAGTTATTTCCAGCAATCCTTGGAACCTCCAA
AATTCCTCTCAGCCTGACATTATATGCCCTATGTGTCAATTCATTATGTACCACCTGGTGGTGCACCTCACACCCACTT
TGGGAGAAAGGGGTTAGAGAAGGGAGGACATCTGTGGACAAGCCAATAAAAGCATTACTGGCATCGTGACTTCATAA
TTTACACTTTTTATTTATGCATAAATTAAGTATAAATAAACAACAAACATGTATTTTCTAACTGCTACCTGTTCTGTTTCCA
GTCTTGCTTGAAAATCATCTTTCTCAAAAACTACCTATCATGTGCTATGCCATTACCTGGGTGACAAAATGATCTGT
ACACCCCTACAAAATGCAACTTAGTCATGTAATAAAGCTGCTTATGTTCCCTCTAAACCTAAAATAAAGGTTGGAAAGG
AAAAAATAAATAAGATAAAAATTATCTTTCTCTATCAGAGTAATTTGACATCTTGAGGAAGTGATCCTGGGACTTCATA
TTCTTTTAGGATTCAGGTGTCCAGATAATCCAGAAAGTAGCCAGCAATTTGGCCATTTGGGGTGTAGAAAACCTTCATACC
TAGGTTATTGTAAATACCTCAGGCTATTCTCTCCAGGTTTCCAGTGATTAATTAGCTGTGAACCTCAACCAACACCTGAC
TCTAGAAGAGTCTTCAAATAGGTCCTAGAAGGACCAAGTAAATCACCATCCCTCAATCCCTCAATTTTCCCTTTTCC
AAGTCAAGAATAAAGAAGTCTGGGAAACATTGCCAGGTGAGCTTCTTTTTAAGCTCATGATTTCTGCTACCTGAGGG
AAGGAGAGAAGGAAAAGAAAAGAAAAGAAAACCTCAATGAATGCTCCATAACCTGGATTTAATCTCTCTTTCCCTTT
TTGGGATAAAATTGTTTAAATGTAATTAACACAGGAGAAAAGTTCAACCAAGTGGCTTCTGCTTTGCTGAAAAGCACTTT
TTCAAACCCAGCTGTCTCATGTCAAATGCATTCAATATTAGTTTGGACATCCTTACGTGGGTCTCAGAATGCATCTCTA
AAGAAAGTGTTTAAATATTATTTTAAATGTGAAAACCCATATGGGTATTTTGGTGATAGGATTTCTTCTATGATTCAGGAA
TAAAGTATAATGCCCAATATAGGCCCTTGCCATTCCCTATCAGGGACATTGCATCCATAATCCATTTTCCATATCCGTTTG
TATGTAAATGAAAAGTCTCACACATCACAACCTTCTGTTTTTCTCATTGTAGGATCGCTCATCTGTATTTATCCACATT
AGTAAAAATTATCCAAATCCAGAAATATAACAATAGTCCGTATTTCTTGAGCATTACTCTGTCTAGGCTCTGTGTT
AAATGCTTTGCATGTAATGTCTCATTTAGTTTTACCACATTCTATGAGGTATTTACTCTCCTTTTCTTATATGGGTAAG
AAAACATGTTGAGTTATTTCAGGTAATTTGCCTATATTCACATACTGGTCATGAGAAAACCTAGAGGACCCAGGAGATTGA
AGCCCATATTTTCATCATTTGACTGTCTTAGGAAACGCTTGTATACTTGTTTTTTTAAGGTATTCTGTACCCCAAGAAC
ATTGAAGGTATATGCAGATTCTCTTTTCTGTTCTATTCCACTAGACCTGAATATGAGGGATGAAAATTGCTTTGGTTT
TGATGTGACTTCAGTACCTTCTGTATTTGACACAGAGGTGAGTCACATCCTGATCAGTGTTGAAAGCATTTAGTAAGAT
TATTAGTTTATAAAGAAGGCTGAACCATGACTATATAAATGAAGCAATTGTAAAAAATCAGAAAGCATTACATTC
ATTCCTTGAATTTCCAAAAGCATTCAACAACAGAAAAAGGGCAAACACGTTTATTCCATGTATATATACTGAATTCCTA
CTATGCACCTTCAACAATAAAGGCTTTTGGTATATAGGAGTATACTGAGCCCAGTTAGATTCAAGTGAAATTCCTAGTA
ATGTCCTGGTATACAAGGAGCTTAAATGTTCAACATATAACATTGTTTCTTATGATAGGTTTCCCTATAAGCCCTCTA
AACTGTTTGTAACTCTATAAGAAATAATTAATAAACCCCAACAAGGTCTATTAAATGTCTTGAGACAGATCACTTACT
CACTTTAGATTTCTTATAGATAATAACCAGCACCTAAACAATTTTAAAGACATAGGAAATCCAGAAATAAATAAAT
ATCATAGGAACATGGAAGAATTAAAGAAATGCGCAAGTTGGGAAAAAACTACTGGAGGAAAAGGGTGAAAATGTGT
GACAATGAAGATTTGCAAGGTTCTAGAATACTTTAAATTAAGTTAGAATAAACTTTTAGTTGCACGTGTGCTTTGACTT
TTTATTCCAGCTAAATGTCTCTTTTAAATTCAGGTTGTTTCATCTCCAAGGATGAATGTAATTTAACTGAATCTTGATT
AGAGACTTGCACATTTCTCACTCATTAATATGATCAAAAGCATCTTATTTATGTCAAAAGACGAGAAACGAAGGCCATT
TTTGGCATTGTCTTAAAGTTGTGCTTTCTTGCTTTATTAGCATTTTCATTTCAAGCAATAGATTGAACAGAAATGCTTGT
GATTGAATGAAGATTAATTATAGGGTATGGGAATATTCAAACCTTTTAAATGTTCTGAGTAGTGTCTTCTGCTGTTTT
GTTATCCAAAAGGGAGTAAGTATTTGGGGAACAAAGATTGTGACACATCTGGTAATATTCAGATGCACACCCCTCAC
TAGACTGTCAAAGGCTGGGCTTGTACAGATGTGAGGCTGTGATGATGTCACTCTTGCTGCACCCATGGATGCGC
CTCTCCTGATATGCGACTCCCATTTGGGAATGTGAAGACACAGAGGAGATTTTAAATCAAGAGCATAGGTAGGAGTCAAT
GATGCATAGCTGGCAGATGCAGATTTAGCCCTGGGAATATTTAGAATAATTTGGATTGCTTTATAGTTTATAGTAGCAT
CTTTTATGACAGGACTCTGACCTAATTATTTCAAAAATTATTGCTACTGATTATAATCTCATTGTTGCTTTCTTTTATCT
ATTCATTGTTTAAACAGCATTTTTAGGGGGCAGGGTAGGGAGAGCAGTGATAGCTTGGTAATAAAGGGCATATGATCTG
GACCCAGCCTACCTTGGAAAATGATTAAGCCCCAATTTTCTATATGTAAATGGAGACAATACTAGCATCTACCTCAC
AATATTGTTGATTGAATGAAATGAGATAATATAAGTAAATTACTTCCAGTAGTCCCTAGCACATAAGCACTCATTAAT
GTTAGCTTTTAAATTTGATTTCCAGATTAACATGCCATAAACTAGGGCTACGTACTGAGAATTCATAGAACCAATTTT
ACTTTGTGTCTGTGTTCTTATGCCTGCATCAGGCATTACGAAGAATACAGAGAGACAACTTTCTATTCTCAGGGTTG
ACAATAGAAGAGAAATAATAACACAGGAAATAAGTAAAGTATAAATCAAACCTCAAGTTTAAATGATGTATAAAATG
AAGAGGTCAAGTTGGGCTATAACAATCAGATAAGATTCACTAGGTGCTAACTCGATCTAACTGAGAAAAATAGACAA
GACTTATAAATATTAGTTTAAACATAAATCTGAAAGTGTTACTCCCTATATTTTAGTAAGACTTCTCTGTGGCCCTT
GCTCCTATAACAGTTTCTTTAAGGTTTAAACCTGCTGGGTTTCTGAGCTCTTCTCATCTTACTAAATGAGAACCTCTAA
TACAAGAGGACAGTGCTTGGAAATCTACATTTGTATAGAACCCAAGTGATTCTTATCAAGCAAATAATGGAAATCTAT
CTTAGAGAAGTCTAAACATACTAAGGCCCTTGTTTAGACTCTATGTAATTTCAATTTTCAGCCACTCTGGGCCTTGACCC
CTGAGAACCAGCAAAAGAGAACCTTTCTTCAGCACTTGGCTTAGCCCTCCCTCTTTTGTGAAGGAGTTTCCCTTCACTG
GTCAGTGTTCTTGTCTTTAATGATGGTCTTGAACACCACATGTTGTTGTACTTAAACACAGAGTTGTAAGTGTTTA
CAGGTTTATATCCATTAAACCACCTTGATCTTGTGTTTCATGCTCTCTTATTCTCACCTTAGCATTTAGTTACCACTCAC
TAAATCAGTTGATCTTGAACTTTAGAAATCTTACCCTTACCTGAGGGGTCTTGTTTACAAAGCAGATTTCTAGATGC

198/375

TCTTGCTCAGGTACTCTTATTCTGTAGTTGAAATGGGCATTTTAGGGCCAGACACTTTGGCTCATACCTATAATACCAA
CACTTTGGGAAGCTAAGGCAGGAAGATCACTTGAGTCCAGGAGTTCAAGACAGGCCTGGGCAGCATAGCAAGACCCCTCT
CTCTACATAATTAGCCTGGCATGATAGCACATACCTGGCTACTCAGGAGACTGAGGTGGGAGGATTGCTTGAACCCAGC
ATTTTAAGGCTGCAGCGGGCCACAATCATGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGATCCCATCTCTTAAAAA
AAGTGAGCATTTTAAACAAGTGTGTAAATAGTCTACCATTCTCTTAAACACACACAAACATACACACCTTGAAAATGCA
AATGAATGAATGTGTGACAGAGTGGGAAGAAACAGCTTCAGAAGGGAGAATAAACATAGCATTTACAGAAAGATAGTGAGA
ATACCACTGATTTGGTATGTTGGATGCTGGTTGGGAGAATTTTATGGGAAAAATACCAGTTGAGTGAAATTTATGGATGT
TCTTGAGAAATAGCAGAGTTTGAATTGAATGTGGCTTTTTCATAAAGTGGTAATTTTGGAAATTTTGGAAATAGGAGAAT
GAATAAAGATGGCATCCCCAATAGTTGTTCATGGCTAGTCTTAGGAAGGGTTGGATCAGATGATCTCTAAAATATCTCTT
AACACTGAAATGTATAGTGTATGCTATAAAATATGTAGATATTGAGTTGTATTAATAAAGCCCTTAGCTTGTATTCTG
GGATAAACTTCTACTTAAATAATATTGTAATTTTCATTCATTAATGCATGTGTATAAAAGTGGATCAGTATTGTGGAAG
GTTTGCTTAAGGTGAGATACATGCAATGGTAGCCTGGAGCCAGGTAGTAGTACCAGCTCAGGAGTACTAATGTTTACGT
ATTCAATGATTTTGGAGACCTGGTTGGAAAGCACAGGCATTATTAAATTATATAAACCCGTAATTAATAAATTATATGA
AATGCAAAGGTAATCAATACTCAAACTCATTAGTTCCTAAGTACTTCATTATATTTTACTATTATCCATGCTCTTGAG
GTTATGTAGTCCATCGTATCTGTGTCTGGAAATACTATATAAGTGTAGTGTACACCATGGAAATGGACATACTGCACAAAT
TCAGGGCCATCATTGGTAGCTTGAAATAAGACATGATAGTGTAGTTACACCATGGAAATGGACATACTGCACAAAT
CAGGCCCTTTTTTTTTCTCTGGAGAGCCAACTGATAAAATATTTTACCAGCATACCAATGGCTCATGTTTAGAATAGTCCC
ATTGTTTTGGGGTAGAAATTCATTTTGGTACATGGCCTGACTCAAAAGTTCACCCCTTTAGTGTACCTCCTGTTTCAGC
ATTGAAGCCACTTATGTCTCTTATATGAAACCAGAAACAAGAGGCTTTTTTTTTTTTTTAATTCTAAGAGTGGCTGGCT
TTAGTTGTAACAGAAGAGAGCAGGTACCTTTATTGTACTTCAATTTAAACTCCTTTCAAAGGATCTGAGAACTTTTTC
AAAAAAAATTTATTTCCCAAATCTGATAAATATGCCTCTATTTTACAATCTTTTACAACCTTTCAAATTACTACAATC
TGAAAGACATTTTCAATCTTTCTTGAAAGACAGGGAGAATATTGCCATGGATGAAGAAAACAATGACTTGTTCCTTTCA
TTGTATAAAATCATTCTTCATCACTGTGAAAATAAGAAAATGAATTTTTTTTAGTTGAGCACAATCTCGAGATCTTTCT
AACAGCCTCTGTTCTTACAGTATGGATGTTACTCTTGGTTTATAGCTCTGCAAAGGAGTCAAAGAATCTTCTTTTATG
AGGGCCCTGAAGAAAGAAAATTGTGCTGATAAAATTACTTTATGTGCGTTTGAATGATGATATGGCCAAGCATTCTTCA
GAACTTCTGAATTTTTCATGTATGCCCTTCAAGAGTTGTAATCCTTACTTAAGCAAATGTCTGTTTAGGAGAGATTCCA
GAGATTTTCTATTTAGAGTGTTTTAAAAATTAAGGAAGGTGTTTACCAGCTTACTAGAGGTTCCTTGTGAAAAGAGAA
ATGAGTTTTCTTCAACAGTCTTATGTCTTTGGTTCAAGCTGACATAATTAAGGTGTAAACATATAGTATAGTTTGT
TGATTAACCTTTAGATGGACATAGAATAGGTAATCAAATTCATTGGATCGAAATAAGTATTTCTTACTCTGAAATGAAAC
AAAATGGAATCTTCAGAAACATGGAAACAATGACCCAAACATCAGAGAGGCATTGAAGATAAATGGGAATATCACTGGG
AATAGTGTAATTTGGAGCAGTGTTTTCCAAGCCCAATCCTCAGACCTCTCGAAAATGGAGATTGTAACACTAGATTGTGG
GCAGTCTATACCAAACCAACAGTACTGAATCAGAGTGGGTTATGGGAATGGCTAGAGCATTGCAATTTTACAGCATAT
TCAGAAAGATTTTATGTACACTGAAGTTGAGACGTGATTTAGCAAAGGTAAGTACAATTTGCCTCAATTCCTTCA
TCTGCAAAATGGGGATTATAAAAGTAGGGTTGTTGGAGGACTGAATGAGTACATATATGTATAGTGTTTAGGACAATGT
CTGCTGTTTTACAGTAAGTGCTCTATTGTTGGCTCTTGCCACTATTATTGTTTTGTCAAGGGCTTGTCTGTGCTAGCTG
GAATGGAACTTAAATGTTTTCTAATTATTGCAACTGTCTAGATTTCTTAAATATCGTAATGAAGCCAGCACAGTGAAGAG
CTGTCTCAGTTTAAATGTAACATTGGATCTATCCTAATAATTTTCTTAGTTTCTTATTGCAATTTGTAACATTATTTAT
TAAATGTTTTTATTTTCCACAGGGTTACATTTATTTTATTACTTCAGAAATATTAGATGTCTATTCTGAAATTTGTGGCTG
TGCCTTTATCTTGCATGTGGAATTCATTTTATATCTTTACAAACAGTATTTATAAGAAATAAGATAAGGTTACA
GTGAGTTGTAGTATGAGATGGTAATTTACATGGGGTCTCCATGTGCTTAGCTTTTCTCTGAAGTTATGCATCCCCACA
GCAAGGGAAATATTTGCATTTCTGAGAGTGAGAATTTATGTTTCATCTCTACTAGGAATGGTGGCAGCTTTTCCAGGTC
AAGGCCCTGCAGATGCCTGATGGTCAATGAAGGCTGGATGCAGGGAGGCAGCAAATGAGAAAATCTCCTGG
GATCAATTAATGGGAGTCTCTGAGAGAGAATAAAGGCAGGAGAACATTTTCTTCTAGTCAAGAAATTCGCATCAGTTT
GCCTGGTAATGGGTTTCATGAAAGCCAAGATGAAAGGGTTTATCCCTAAGGAAAAAAGGGCTCTCCTCAGATCCTCTT
TCTGTGCTCTTTTATCAATGACTAATAATAACATGCTTGCATCCATGACAATCTTTCAGAAAACATGATGCAAAAACAAG
TCCAAAATTAGAGTGTACAGCTGTCTGATTTCTGGAGTTTCTGGTGTGTGCTTAGTAGGACACACAGTTTGAGTTACA
TGGCTTCATTATATGATTACACACTACTTTGTTGCCCTCATTGGTGGTTAAGGTGATTTTAACTTTTCACTACCCAAAA
GCAGTGTCTTGAACATACCAATGAAGACGGAGAATTTGTTTCAGTCCCAGAGATATCCCAAGCAAATACAGCAGTGAAC
TCAATGGATATTTGTGAAATGAATAAATAAATGAATGAGTACTACTGTGAATATTCTTGTCTGTTTGGCTGTCTC
TCAATTTGGAGAGTTTCTTTGAGGTCCGTGACAGAGGTTGAATTGCTGGATCTTAAAGTAAGAGGATTACCAACTTCCC
TATACGATGCTCAATTCCTCTCCACAATGGCTATACTAGTTTACTGTCTGGCAATCGGTGTATGAGGGTTACCTGTTTA
TCACATTGTTGTAACATTTGATTTTGTGATGTCTAGGTTCTAACTGAGGTCCAAGGGGAGTTGGTGGGCAAGTGGCGG
GTAGCTGGAAAAACAGTGCAGGAACTGTAGACAGTTTCAACATGGATTTACTCTCTCTCTGAGGATGAGCCATGAGCGC
AAGATGTATGTACAGCGTCAGCAGCGTAGTTGTACCTTTTACAGACAATAGTGGCTCCAAGCCAAGCACAAAGCTTACAT
GGGTGATCACCTAATGTGCCCTCACGTGGCGTGGTTACATAATGTGCAGAGTTGTGAGCCTGTGCTCCAAACTCACTGAG
TCATGCTGGACCGGATGTCTGCTTCGGCCTATTTTTGAGAGCAGCACATCCATTTTCTTACACTCCACCCCTCAATGCC
AAAGGAGACACAGGCCCTTGGACACACAGGTCTAAGACACAGGCCTTATACGTACACTCTGGGGACAAAGGCCCTGGACA
CACAGGTCTGACACATAGGCCTTAAATTTCTACTCCCTAGGCTGAAGGAGTCTTTTAAATGGAGAAACATGCCACAGGG
TGGAACCCAGACCCAGAGGCCACAGCAGTAATACAAGGAGCAACAACCTCAGGTTATGACGGGCAACACCCCATGAT
GATGTTACCCGAATTTACTTTATGCATTAAGCCAGGTTTTTATTTCCCTACCTTTAGGGGCATTGGGGCATGCAACAAC

199/375

AGGTTACCATCCGTTTCCATCCTGGTCATAGGAGGTCACTCTTCCCATAGGTCTTGCCACATGGCCTAGCCCCACA
TGGGCCAGTGGCCAACTAGCCACTTCTGTATTTTCCAGGTGCCTAACCAACAAGGTTAAGCCTCGATAGACCACACAGCT
ATTGGTGACAGATTATCATATGTGTACCTCTTTGGTGATCACCATTATATTGCTCTGACTTCAGCCCATTGACTACTT
TGTCATACCCGGTATGAAACCATATGGAGTCAGTACTAGGCTGGACTGTGAGCAGTCCAGGCAGTAGCAGCAGCCAG
CTAGACCCATCTGTGTACCGTGCCCCATCGGGCATAGGGGGGGATGCCCTTCTTAAATGGTGAAGGCTCAGCATGTAG
GGGTGCTTCAGGCCCATGTCTTAGGCCCATGGCCTTATCTTGCTTAGGACTGCTGGTCTCAAGACCTCTTGCAAC
TCTGCTGCTAAGGGACTTGTAAGTCTAGCGTACTCTGTTGCTTCAAGTAGGTGCCCCACTTTGCTAAAGTGGATGTCTGCA
CTGTCCCAGTCCGGGGGGTGTATCAATGAACACATCCATCCTGCTATCAGGTAACCTCGTCTACACGACAACCTGTAGC
CTGTCTGCTGCTCTCATGAGCCCGAAGGGCAGCATATGCAGTTACTAAGTCTTCTATCAGTGAATACTGGAGC
TCAGCTTCTTTCCATAGTTGGGACCAAAGCCTACTGGTGTCTCAAGCACTCCATGCTCTGCCACAGGCCCCAGCCAA
AACCATCTGTGGTCACATGCACATCCAACTCAAATGAGCACCTTGGTCAACTACCCATAGGGCTTGTGCCTGCTGAAT
AGCCTATTTAGCTGCCAGGAAGTCAGTCTCAGCCACACTATCTTAATTCTAGGCAAGAGGAGCATTGCCGCTTCTAAAT
CTGCAAGAGAATCAGAGGTTAACATAATATTATCAATAAGACCATGACATATGATGGGGCTATGCATATATCCCTGCAG
CAACACTATGAAAGTCCACTGTACCTTCCCGTGAAGGCGAACTGTTTCTGGCTCTCTAGAGCAATGTTAATTGAAAAAT
GCATTAATCAAGTCCACCACATAGTGGCACTGTCCAAATTCATCATCAAGCGGTCCATCAAATCTGTAATAGATGGGA
TGGCTGTGAGGCCATGTAAACATCCACCCCCAGAAATATATCAGCGCTGGTGTATACAGTGCCAGCACTTGCTGTATG
TTGGTGGAGGACCAGTGGATTGCTAATTTACATGTGGCCTCTATTTGTCTGGTGTCCCCCAGGCCAGGCACCTCAGC
CAGTTCCCTAATCAAACAGAAAAAGCTCAACATTTCCACCTGGCTGCAGCAAGTAGTCTTTGAGTTGAAGCAGCTGAGT
GGGACCAGGTCTACAGCAATGTCTCTCTTCCCTTCTGCTTCTCAGTCAACCTGGCCAAAGTCAAATCTATCCACATCT
AAAGTTAARAGTACTTCATTGGGCTGCTTATCGATTTTCTCTCAGTCAACCTGGCCAAAGTCAAATCTATCCACATCT
GTGAGTGGGTCACTTGTGGGGCCCCCTTTCTTCCATGATGGGGAGGCTCTGTCAGGTGGGGCATCTTCCCCCTTTT
CAGTGCAGACCCAGACCAAGCAGGGGTCTCTGGCTGAGATGACGGACCCAGGCCTGCATTCACAACAGCCTCTAAGTCC
CTTTCCAAACCTTATGCCAGGCCCTTCAGGCACCCACCTGCACCTGGAGATCCCCATTCATGGCAGCCTCTAAGTCTTTT
TCTAAGCTGTGTAGCTGGGCCTCCAGGCACCTGCCTGTGCCAAAAGGCCCTTCTGCTGCTGCTCAGGGATT
GGGAGTGTACTTCTGTAGCACAGAAAAATGCCCATCCAACCTGCTGTCAAAGGCTCATCTCTCTCGGTGCTCTGC
ACTTCCAGCTGCTTCAGTGCTTTCTCCGTGCTCGTGGGGTACCCATCTACTGCTGGCCAGGTTTCCAACAGAGTTCACC
CTTGACGACAGCTGTGACAGGTACCAACAACCCATGTCTGTCGACATTCGCAACCCAGAAATCAGCAGGGACCAAAGG
CTCGCCACCTTGGGATCCTGTCTGTGATGCCAATGTGTCAGGTCTAAGTCTGAGGCTCTGAGGGGAGTCAGTGGGTGAGTG
GTGGGTAGCTGGAAAAACACTAGAGGAATCATGCACAGTTTCAACGTGCCCTTACTGCTGAGTGTGAGCCGTAGGTGC
AAACCATAGGTACAGTGTGAGTCCGGTAGTTATACCTTTTACAGACAATAGTGGCTCTGAGCCAGTTACAAGCTCATGT
GGGTGATCACCTAATGCGCCTTACGTGGTGTAGTTACATAATGTGCAGAAATGTGCACCTGCCTCCAACTTGTCTGAG
TCATGCTGGACCTGATGTCTGCCTCAGCCTATTGACTGCAGCGCATACATTTTCTTAAATCAGATTTTAAATTTTT
GCCTGTGAGATGAGGTATGTCTGTCACTATTGTTTAAATATTTTTTTCTAATGTGCTAGCAAAGTTGCCTATCTTCTCA
AATGTTCACTTATTGTTTTTTTTTCTGTGAGTTCTTGCATCCAGTTTGAACAGTACTATTAACTTTGTTTTAATGCTG
TCAAATTCCTAAATAGTTGCTTATGTACAGAAATCTAAGTCTGATGATATCCATGCCAAAGCAGTTGAAT
TTAAATTCCTAGATAAGTAACTTTAAATATCCAGTGTATAGTAAACATTTTATACTGGACTATTCCTCAAAAAATTC
TTTTAAACAGTTGTCAACCTTATTTTATTTCATTATAATAATGTAACTTTAAATGTGAGATATGATAACCACATCTCTGA
AATGTGACAACCTTGTACCAATGTTATTATGCTGAAACATAAATCTTGGGCCCTGCTCAGAACCTTTGCCTTCTA
GTTTCAGTAATTTGTAATAATTTTGTGTTTTGTTTGTGCAAAATTAACCTTACCTTATTAACCTTATAGCGTATATA
CATATAGATMTATTATTATAATTTATTTTAAAAATAGCTTTATGCTCATTTGGGCAGAACTGTATCAGCACAT
TTTTTGGCAGAAATAGATTCACTAGACTAATACTCTGTTATAAATCCCTGGTAGCAATGTTGGGTAAATTCAGTGGACT
AATAAATCTGTTATAAATCCCTGGTAACAATGGTGGGGTTTTAATGAGTAACATAAAGAACTTAGAATAAAACAACCTTA
AATATATATATATATATATATATATATATATGAATAATATTAACCTTTATTTCTTATATTTGTATAATGTAGTTATCTGATT
TGCAGAGGGAGAGAAAAGAGACAGACAAATGGATAGACAGACAGAACGAGATCATTTAGACCATAAGGTTAGAAAAATAT
TATGAGACTATGGAAAGGTAATGAATATGGTAGAGAGAGATGGAGCTGAAGATTATAATCTTTACTTATGGACTGCTC
CAGGATAACTTTGTTTGTATGTTATTTTAGCCTTCTGATATCAGTTTATATACTCTAAAACGAGTAGAAAAGAAGCATCA
GTTTGTATAAATATTCTATTTAAATATTGTCAAAGCAGGTCCATGCATCAGAAGTCAAATTAACCTCACTGGGGAAAA
CTTTGAAAAGGCCCTGAAGGAAATGTACTTGATTTTTATAATGTAAATGGCAAAGGAAATGTAGTCAAATATGAGAGCT
AATGAAAGAGTGAATGGATAAGTAAATCCACAAATAAGCACAAATGTCTATTTGGGCTGTTTTCCCTTTCTTACCAAGA
AAATTTTCATGAGAGTTGCTAATGAATAAGATCTGAACATTATATAACCTTTTATAAGCAATTTTCTCAACCAATTTTTTCT
TGGTTGAGATGTCAACAAGAAGTAATATATACATAATATACAAAAGATGCATAGTGTATTAATAATATGCTACCAAT
TAAAAATCGCTGGAATAAATTTGGCATTGGAAATGTAAGGCATAAAGAGCAGATCTTGATTAGACAAAACTAGGAA
GTTATAGTTAGTTAGTTAGTAAATGTAACAAATCCATTTTGATTGTGATTCCCACTAGCTTTTAGGCAGAGCCTCAAC
CACAGAAACTCAATCTTAGTGGATAAAAAATATGCAGACAATTTGAAGGGAGTGAAGAGAGCAGAAGAAAGTATGATGA
AAGAATTGAAGATTATGCAACAGAGGAGTATTTACAGCCTGGCTAGATAAATGAATGGATATATTATTTTTTTTTTAATT
TTTTTAGCTAATTTACATTGTTAATTTTTTATTTAACCTATTATTTTTTAAAGAAGATAAATACTGCAGTGGAAAGAGACT
TAAGGGATTATACTAAGGGCAATTATGAGAACTCTGGGACAAAATAATGGTCTTATATCAACAAAATTCCTGGAAG
TGTGATATGTGAGCTGCAGAAAATTTCCCAATGTAGTGATAAGAATCTCTGAAGACATAGGCAGATTGAAAAGACA
TGAATAAGAAACAATGTGAGATACATTTCCATACCTACTGCAGAGGTAAAGCAGAATGGAATTTGTATCTTTTCTCTG
CAGGTCTATTAGAGAAGACAATAGAGAACCCTCTAAGAGGTGATTGTCAAATTTGGTTAATATGCTGTGGTTTGGAGTG

200/375

CCTGCATTGTGAACAAGGGCACATTCATTCAACTTTCCACATCTTCCTTTCCCTGTAAAATGTACATGGAGTTATGGTA
CCTTATTAGGCTATTGTTAGTATCACATATAAAACCATGTAAAATTCCTACCTTATGCCTGGTTCAGTCAGTGCCTCCTC
AGGTGGTAGCTATTGGTTAACCTATTCTTTATAACATAATTGAAATTAGGTTATATGACTTTTAAATATCCAAACAGT
CAGAATAGAAATATTGATGAGAAATTTTGCTTCATCTCAAAAACAGTGTTAGAACTACACCAATGGAGTATTTTTCTCC
TAAAAGGTTAATCAGGATATGACATTTATAGGATTTACAATCACAATCCTGATAACTGTGAAATATAATATCAGACTGT
TTCTTACTATTTTATTTTAAACATTGACATTAAGTTAAATAATATATTTTGTACTGTAGCCTAGGATTTTATTTTCCC
TGTTATGAGAACAAAGGATAATTATTTTACAAATGAAATTTTAAGGGATTAGAGTGCCATAGACATGCTCATTGCATTAT
TAATGTGCAGAATACTGGAGTTCTGCCATCTTCATGAATCCCCACATTACATTTTGGATAAAAGAATAAGTTCTGTATAT
AAATGTAGGCTTCAGAAGCTTTTGTGATTCTTTACCATATTTTATACAAAGGCTTTCTTGCTTTCTCGCCTCTCATG
CTAAGTACAGGCCCTTCCTGTACTTTTCGGCTAAACGAGATGGCCTTTTCATGTATAAAACTCAGCTGAAAAATTGACTTC
TTCATAAAACCATTCCTGTTTCATCCCTGACTCAAGGTCCTGACTTGAATTCTTCCGACTTCCCTGGGCACTGAGCCAG
CATAGTTCTGGTTCGTTGTWTAATTGTTTATATCCTTGTAGCATATTAGATGCACATAGTCACCATGTCTCACCAGCA
ATCAGAATCTCTCAAGGAAAGAAAGCATGTCTCTCTTTCCCTAATAATCCCCAAAGCTCTCAATACCATGCTGTGCCC
ACAGAAGGGAATCAGTTAAATCTGCTGCAATTGATTGGAACCTTCTTTCCCCCAGATTTTCCCTTAGGTGGTCTCCTGC
AGAGTTCTGTCTAAAGTAATGGAGACTTTGGGATTTGTATTCTCATTATGCTAATGGTTATTACTTCTTTATTTTGTAA
AACTGGTTGTAGGATCTAAGCTAACCATGCTATTCTTCATACACCCAGCGATTCTCATTAGCAACTGCCCTTCAAA
TCGTCCTACTCCCTTTGGTCTCTCTCCCTCAGTAGGAGAAGGATGAGAGGAAGTTGGAATATTTACACTGAGATGAG
ATCCTTGAGCACTTGAGCCCTGAGGCTGCCTCTGGACTAACGTTTCTGTTTCAGCTGTCCCCAGGTTTTTCAACAAGAGC
TGTTCAGAAACAAGTTTGTGACTAAAGAGCAGCTTCATCTGTAACTTCTGTTTCTTGCTACTCCCTGCTGTGTTTCTGGC
TATCTGGAAGCTTCTCAGCAGGGTAGCAAGTTGTTGGCGCCACTAACACCTTTCTCTTTCAAATTCATATTCTTCCTT
GGGAGGTGAGTTTGCATTTTCAGAAAATTCTATTTTAGTGAAACACCCAGGAATCAGTGTGAGTTGGCTTTTCAGCTGTG
AAATAACTGCAGAGACTTTGTTACAGCTAAGGGGGTGCATTTCTTTGGAGAGTTTAGATTTTCTGTTTATAGAGAAGA
GTTCTTAGGAATTTTATGCTTAGCTGAAAGTATTAAACACTTTTCTTATTTCCCTCAACATGAATTCCTTTTCCGGGG
CTGCAGGGGAAAGGGCTCTGATCCTGGTTCAGTCTCTAGCTTGATCATTTTATGTCGAGTTCTTTACTTCCATGCAACT
CTGTTTCTCTCAAGTATAAACTATTAGTTGAGTGAGGTAGAAGAAGTAGATGATCTTTAAAGCACTTTTAAAGTCTAAAA
TGTTATGATTCTGCTATCAAATTCACAGCTTCTCAACATCAGATAAGGGTTGGCATGAGTGTGCTGAAAATATATTTG
GGTTGGAGGAAGGGATATCCTCGATTAAAAAAAAAAAAAAAAAGCCAGATGAGAAATTAAGACTTTTCAGCCAATGCTATT
GACATAAACTCAGGGTGACTTTTCAGCTCCTAAGTAGAAGTGGAACGTTCAATTAATTAAGCTTAGGTAATACCTCTTTA
TCAAAATTAATAATTTATGTTCAAATTAATCATCATGAATTGACATAGCTAATTTGACCCCTCATAGGTTATCAGAGTCT
TTTTGGTGAATATCATAGTCTACATTAATTGAAAGAGGATAAGGTACATAGGTGTCTCTCCACAACTAAGCCATCAT
GTCTAATGTAGTAATGAAAGCAGATTTTGGACTGAAATTTTGTGACTGGCAAGCTTTTGTGTACCAAGGAGCCACAAC
TCATAAAGCCTATTCTCATAAGCTCCATAGACTCCAGCTTTCTGTCTCTTTCTTCTTATTAGTCTAGCTAGTCTATCTATTAATTT
AGATATTTTTTATTATGCTGTGTTGATTTCTCTCTCTTTCTTCTTATTAGTCTAGCTAGTCTATCTATTAATTT
TTTCAAAAATCAGCTCCTGTATTTCTTGTATTTTCAAGGGCTTTTCATGTCTATCTCTTTCAGTTCTGTTCTGGATC
TTGTCTTCTACTAGCTGTGGGGTTTGTGTTGAGAGGACATGAACAGACACTTCTCAAAGAAGACATTCATGCAGCCAAC
AAACATGAAAAAAAGCTCAACATCACTGATCATTTGAGAAATGCAAATCAAACCACAATGAGATACCATCTCACACC
AGTCAGAATGGCCATTATTAAATAGTCAAGAAACAACAGATGCTGGTGAGGTTGTGGAGAAGTAGGAACGCTTTTACAC
TGCTGGTGGGAATGTAAATTAGTTCAACCATTATGGAAGACTGTATGGCGATTCTCAAAGATCTAGAACCAGAAATAG
GATTTGACCAACAATCACATTACTGAGTATATACTCAAAGGAATATAAATCATTCTGTTACAAAGATACATACACAGG
TATGTTTATTACAGCACTATTCACAATAGCAAGGCATGGAATCAACCCAAATGCCCATCAATGATAGACTGGTTGAAGA
AAATGTGGTACATACACACCATGGGATACCATGCAGCCATAAAAAGGAATGAGATAATGTCCTTTGCAGGGACGTGGAT
GAATGTTCTCACTTATAAATGGGAGCTGAACAATGAGATCACATGGACACAGGGAGGGGAACAACACACTGGGGCCT
GTCAGGGAGTGGGGTTTAGTGAGGGAAAGTATTAGGAAAAGTAGCTAATGCATGCTGGTCTTAATACCTAGGTGATGGG
TTGATAGGTTTCAGCAACCCTGTGGCACACATCTACCTATGTAACAAACCTGTGCATCCCGTGCATGTACCCCAAGAAC
AAAAACAAAAAAATAAAACCTAAAAAAATCTTATTTCAAAAACAGGCTATGGGCTAGATGTGGCCTGAGGGCCATA
GTTTGTAAAGGCTGGGACTAGACCAACATATGCATGTGACCATCTTGTGGATGAGTTTCCACAAGACTGAGAGCTCCA
TAAAGGCAGAGACTGTATTTTCTCATTTTTTATTCCCTCAGTGCCAAGAAAAACAGTAATTCATAAATGTTTGTGTC
ATTTAAAGAAATTTATTCACGAAGAGTTATAAAATCTCTGGTTAGTGATGTCTCACTTCTGTGTACAGCTAAGAAGACGTACA
GTTTTTAAATAATGTTACTTAACGTGAACAAAACTATTTTATCAAGAAATATAAAAGAAATCTTTTAAACAAGGTTGAG
AGGTTACTTACATGCTAAGTTTCTGCTATCTTGTGATGTTCTGTCTATAAAACCTTACAGACACTATGTCTGTATTAC
TGGTTTCATTTGAAATTTTGCCTTATGATTAATCTAATTTGGTTTCATTGTCCATAATAAAAAGCAATTGAGCATCACT
GATGTGSATACCATTTTCTTTAGGTTTTAAGAAAACCACTCTAATATTTTTTTCAGGGCCATTATTTTATCAAATATGTA
TATATGTGTGCATAAGGAGARGGAGCTCGGAAAAGGATTTATATTTCTTATAGTCAATTTTATGTTCTTTCTACCTTA
CCACTAGCTCCACCATATTGAAAATATCTCTATAAATATGGGTTATGTCTTATAAGCAAAGGATACATTTCTAGAATTC
TTTCTCTCTAAACCATGAAGCATCATCTTAAAGCAAGATGCTAAACCTGAAACCTCTGTAGAGCACATTTGGGTAGACT
TATGTTCTCATTCTTGCCTAGAAGAGAGATATTTCTAGTTTTCTTATTTTGCTAACCTTATAATTTGAGCACAGAATGTC
AGATTTGTTTTCAGCCCTTCGATTTAATCACATCATGTCTGATATCCTAGCATTTAATTACCCAAATTCAGGTGTTGTT
CAAGAAGGTAGGTCTGTGGTGGGTTAGCCTTAAGCTAGTGGCTGAAAAGGTCTTGATTTGCCCCCACATCTAACCTAGT
CACTTCTGAGCTGAAACTCCCATATCACCTGGGGACAAGCGACCTGAAATCCTCACTGGCCACAGCTTCTTCTGAGG

201/375

GAAGCTGCAGGAAAAAGAACAAAAATGAGCTTTTGTGAAAGGATTAACCTGGGTGAAGAACATCCTCCATAACCAAATA
AATGGAACCTAGTAACCCACATGGCCAATCCCCAGGGCACTAGTGTCTTTGGGGATATCAGGGTGTGTATAGAATTTTCG
TTTTTGTCAATTCTTGAAAACATAAAWAATCTCTGAAAGAGTACTAGTGGTCAAGGTACTAGTCTAGAGATGGACCAA
CAATCATATTAAACCTAATTTAATCTCCAGAATTTATATTTTGAGATTGGTAGCACTACTATCTTCATTTTGTACTTTC
CCCAACTTCCTGCAGCTAGGATTCAAATACAGACCATCTAACTCCAGAGCACTGCCCTTTAACATTGTGTCTATAATCCA
CCACTTTGCATAGTTGATCCTACAAGAGGATAAGTAGAGATCAAAGTAAGAAGTGATCAATGGATTACTATGTCAAGCA
TGATTCCCTCAAACCTATTGGGAAGAATAAATACCATAACATGTATAGGGTGTGTGTACAATTCCTGGCACAAGGTAA
GTACATGATAAAATGGAACCTATTAATATTAGTAACCCAGATAGGTTCTGGGCACATTAGCAGGAAAGGTCTTCTTAATT
TAAGTAAGGTGCTAAAAGCATCTAATTTTATTAGGATTGTTATGAAACAAAACTAAATGTGCAAGAAAATATATTTAC
CGTAGCCTGGGGAATAAGAGGCTCTTTCCTATGTTTGCATTTTCAGGCTTGCCTTCTTACTTTTAAATTTATCT
TTACAATTGCCCTTCTGCTGGGTTTGTGTCTTCTCAGTTTAGGGAAGGTGACAAGAAAAGTCTGTTTGTGTGTAATT
GACATGAAAAATGGTAGGCTTTTAACTCAAGGAGGCTCCAGACAACAGTTTGGTTATTAAGGAAGGGGAGGACCTAGGG
GAACAATTGTTTCTGGCCTCTCTTCTCAGGCCTGGAACAATCTTTCATTACTATATTTCTTGGCACAAGAGCAG
TCAATATTAAATTCAAAAAAGAAAAATCCCTCACAGAAACAGCTGTGTTCATATATACAGCCAGTTTACTCTGGCGAA
TTGCTAGACATGGAACAGTTTTCATTTCTTTTGTGTTTATCCCTGATAGTTGTCTTGTAAAATCTGCCTTTTGTAAAT
AAGGGAAGGCTGGTTTTAAACAGCTTTGACTAATATTGGTAGTTGGAGTATTAGTATTACAGAGTTTGTAGAGAACTAA
AATAAACCTGATGGAACACACATATTTCAAAGGAAACATTTTAAAGGTGTTCTGGTTCCATTTTTTCCATTTTGTAT
GTAAGTTGGATTATGATCACTTTTATGTCTACATTGTCTCTTAGTCAAAAATGTGAGAGACGCCATTCAAGTCTAGACTT
GGACCCCTACTGAATGCCTTGTTCATGGACACCACACAATCTCGATGTAAATGTTTATTGCTGATCTGTACAAAAGGGG
AAAAGTAGTTTTTTGAACAACAGAAAATACCAGTTAATCTCACTGGATTTCAGGAATTATAGCAAAGCAATCCAATAAGT
GGATTCTCTGAGAGTAGGAACCTCAAGTGTGTTATCTCAGTTTTTATCCAGTTTCCAGCACAATGCTGGCACCATTAA
TTCTCAGTCAATGCTGGAGAATTGAAAAAGAATCCTCAAAATTTGGATGACAAAATGACAAAAGGTGTCCCCTGATACAG
AAATCTGTCCATGGCAGAAAGATTAGTGATTGTAGATATGGTGTCTCATCTGTAGATGATGGTGTCCCATTAAAGCATGT
TTTCACTAATTACAATAAATGTTGAAAGAAGGAGTTTACCTAGTATCCTTACTAATATCAGGGAATGGCCTGGGCTTT
GGGGAGATGAGAGTCTCTGCTTTCAGTTTAAATAAGTAGGATATTTGTGTTTTTGTATTATTTGTTAAATACGACGGG
TTAGCTTGTACCTACATAATATTGTGTGGCATAAATAAAGGTGAATTTCCCAATATGTGCTCCATAGTGTGACAATG
AGTAAATGTTTCATTCTAATAATTGTAAGGGTTACCTCCCTCGCACTCCTTGAAAATATCTTTTATTCAAATTTTTTCGA
GCTGGAGGTCATGTGTTACATTTCTGTTGTGTAACATGGCCTCCCTCTCTTCTCTGTCTCACTTTCTCACTTTCTCC
CTCTTTCTTTTACTCTCTCTGCCTCTACCTCTGACTCCTTCTCTCTTCTCCAGCTTTGCATCAGAGCCATGTAACCTGA
CATTTTCTTGGTTCCCTCAGGACCTGTCTAATAGCAGGCAATATTAGATGATGATTCATGTTTAAATGAATTTTTCT
TGAATGTATGTATGTTGCTTCAAGTCATTCATGCACACATGTAAGAGGACAGACAGAGCCCTGCTGAACACCCTAGCA
AATCTCTCTCTAGTAGACCAACAAGTCAATCTGTGCTCTTTGATTACAGTTGTTCAACCAGTTACTAATCTAATAA
TTGTAACCTGGTTGAACAACCTGAACCCAAAGGGTGCAAGTAGAAACATTTTCATTGTGAAGTCGGCTGGGGACAAAGAAA
ACACCACGAGAACCCCTTCAATATGCAAGGGGAAAATTCCTTCTCAAGTACAAGCTACATGGTGCCTTTTTGAATTAT
CATCAATTTGTAATGCTGTATCAATACATATGTATTATCTGTTCTTTTGGTAAGGGTTGTTTGAAGTATAAGGTACTTC
CTCCATTAAAGGTGATACTAACACATGTTAATTATTGTCTGAAAGTCACCAAGGATATGAATAATAAAAAGTTTTAAAA
ATAAGACCTGTTTCTTTTATTGATAGTTGTACCTCAAGGCTGAAGTGAGGTTTGCAATGTAAGTTGTAAAATGTGATGT
GAAATAGACAATTCTTTGTAGTTTATATAAGGCAATATATCCATGTGCAATTATGGTCAAAAACAGCAGACTTTTAAAGT
GATTATTCTAAAGTTATTTTTTCCAAAATAACTTTTATTACTCTTGATATCATACCATATTCACAAAACATTCTGGTAA
AGCTATTGCTCAGTGTGTTGTCCAGTGAGACTCAGGGACATTTCTATGTGACGCTTTAGGATTGAAGACAGTTCCAC
GTTTTCTGAGTAATTCAAAACCTGTGTAAGAGATTATGTTCCCTTTGCATATTGGCTGCTAAGAAGCTCACTTTTTCACT
TATGATACTTGGATGCATTTTGGCTTTTGGGTTTTTGGTTTTTGGTCTAATTTTTTTTTTTTTTTTTTTTTTTTTTTGA
GACAGGGTCTCACTCTGTTGCCAGGCTGGAGTGCAGTGGCACCATCATGGCTCACTGCAACCTTGACCTCTCTGGCT
CAGGTGATCCTCCCACCTCAGCCTCTCAAGTAGCTGGAATTACAGGCATGTGCCACAACACCCAGCTAATTTTTGTATT
TTTTGTAGAGATGAGGTTTCGCCATGTTGCCAGGCTGGTCAAAATTCCTGGACTCAAGCCATCTTCTGCCTTGGCC
TCCCAAAGTGCGGCATTACAGGTATTAGAGGTAGGAGTGCAGTTGCATGATCAGGCTCACTGAACTCTTCTTTAATTTTTT
TGTTTGTGTTGTCTGTTGAGCAGGCTGGAGTGCAGTTGCATGATCAGGCTCACTGAACTCTTCTTTAATTTTTT
TATTCTCTCAGCAGATTATAATTTATTTAAAGTAGGGAATAATTGGCCAGGCGCAGTGGCTCACACCTGTAATCCC
AGCACTTTGGGAGGCGYAGGCGAGGAGATCAAGGTCAGGAGATCGAGACCATCTGGCTAATATGGTGTGAAACCCC
GTCTCTACTAAAAAATACAAAAAATTAGCCGGGTGTGGTGGTGGGCACCTGTAGTCCCAGCTGCTTGAGAGGCTGAGGC
AGGAGAATGACGTGAACCTGGGAGGGGGAGCTTGCACTGAGCCAGATTGTGCCATTGCACTCCAGCCTGGGCGACAGA
GTGAGACTTCATCTCAAAAAAAGAAAAGCAGGGAATAATTAGTAAGTGCCTAACTAATCAAAAATTGTTTCCAGGTGAT
GTTGCTGTTGATGTATGAAAACCTCTTTCACCTAGCTTCCCTCTTCATTCTTTCTGTCTATTTCTATTGACCAGTGC
TTTCTTGGCCCTTGGAAATGTGATTAACTTTTGCCATGACCTCTATGTTAGTGCCACACCTGACACCTTTATGCCACTC
TCTGCCCTCCAGAACTCTGTGTCCATCTTATATGTTTTTACCTTCTGTGGGCCTCAGGTCTGGATGCAAAGCTGTAGAG
GAATTGAGCTGTTTTTCAAGGGATCCAAGAACACATAGCATGTGTGAAGTGTACTAAAGCTTTGAGAAGTTGTGAAG
AAGATTACATCAACTATGCACCACACAGCCTTCTTGTCTTGTGGTACCATCTCCTCACCTCTGTGTTGCTCCTCTTG
GAGTCTTTCACCTTCCACAACCAGCACTTCTATTCTCACTGTCTGAGTGTGACTTTCCATAATTGTGAAACTCCTTGGGC
TTATCCCTCACACTCATTCTTGAATTCTAAGGAATGGCATTCTCTCCATTGTGCTTACATTGCTTTTCACTATTAAAT

202/375

GTTCTAGAGAAAAGCATTTCATTCACTCACTCACTCATTCACTCACTTTAAACAAAACCTGTATGGGTATCTACAGTACTAT
GTTCTAGGTATACTGAAGACACTAACATAAATAACATAAATAACCTTTTCTCAGGGAATTTAGATTAAAGTAGTTC
AAATTGGAGCAGGGGAAGCAAATATTTACGTAGATTATCAGGGAAAATGTGTAGTGAGTGCCGTGATTAGCACTATGCA
GAAGATTTTATGGGAGTGGCAAAAAGCAGAACCTAACCTTTTCTGGGGTGAAAAGTGTGACCTAACTGAGTCTTAAAG
AATGAATGTAGGGTGGAGAGGAATRGGAAGAGCATTTCAGGGAGAGAGGAATAGCAGGAACAGAGACACTGATGCAA
GGAATCCCATGGTATTTGTGATGAAGGGATGATTTAGTAGTTCACTGACAAGACATGAGCCTGGAGATAAATAAGGTTT
AGGTTCTGGGGACCTTGTGAGCCAGGTTAAGGACTTTGGGTTTCATCCTCAAACCATGAAGCATTCCAAGCAATTATGTG
ACAAGATCAGATTCTAGGGGCTGAATGGAGAATAAATATGTAAGTGGCAAGATTGAAGGCTGGGAATGTAAAAGGTGGC
TCCTGCTGTGGCTTGGGCAAAACATCACATAGGCTTGAGCTAGCTTTGTGATTCTACGGGATTGAGAGGAGAATGCTAA
TTTCATAAATGTTTAGTGATATGATTGGCATGTGAWCTGAATGCAACTGGAGAAGGGGACCAGTCATTTACTGAGTWG
ATATTGGTAATTGATAAATAAGACCAAAGAAGGTGAGGTTTGGGGATAGGCAGTGTAATTTTGGAAAGTAATAAGGGGA
TTGAGGTTCTGTCCATGGCATTGGTGGGGAAATCTAGCATGTAAATACATGTAAATAGATAAGTAATATGCCTATACA
TTTATATAAGATATCTATACACTTATTCTCCTTCTTTGTTTATTATTAGGTGTGAAATCTACGTGATTTTTTTCTCCC
ATATTATTTTTTGGTATTCAATAAATGTGAATCATGAAGAGATAGCTGTTTTATTATTAATCTCTGCAAGTCCACATTTTA
CCCATTTTTGATTGTAATAAAAGGCCTATGTCGTTATTTAATTTTTTAACCTTTGTGCAATGATTTATAGTAAATAGCCA
AAAGTGTATAGGTATGATAGGCCAAAGTTGGGTGTGGTAAATAAATAATACCACAAAATGTTTTCTATTTAGCCA
ACTACTGCAAAGTTACTTTAATTGTGTTTGAATTAATTGATTTCACTTTAAACCAGAAACAATAGAGACTGTAATCAC
ACAGCCCTGCAGTTCTGAATGTTTTGTTCTCTTTTATTTAGTCTTAGTGGCAACAGGATAGAGTT
CAGTAATGGTTATGCAATTTCAATTGTGCAGGGTATTTAAATTTGTGACCAGGGATCCCAGGAGACCAGCTATTAGATTT
TCAATGCACTATTAGATTAAATMTATCTACTCAAACCTAAAGGGATCCTGCCCTGAGGCTGTCTGATCAATAGTCTATCAT
TCCTGTGCAAATGAAGCTATTAAGATTCTCTTAGGAGGTAGACTATCTAAATTGGATCTAAGTAGTAGATGGTGACTGA
AATGAGGGATATACTGATCTTAATTGGCATCAATCTGACCTTGATAAGATTTTGAAAAATAAATACCTTTTTTGCTAC
AGGTTGAAAAAGAGGTGTAATAAGTCCCTATTTTTATATTATTGGTTCTTAAGTACTTATCAGAAAAATGACAAAAGTC
AGTGTCCATAAAACAAAGGTTCCATTGATCTTTGATCACCAAATCATCATTCTATCTTCTCTTTTTTGTGTTAGGTAC
TGCAGTCAACCATACCTCCACCACCATCATAATTATATATAGCTACCACTTCTTGGACACTCAGGTCTGCTTGTGTTG
AACCAGACATTTCTAGCTCCAAAGCCTGCATTCTTAATTTCTGCACTCTTAATACCATCTTTTTAATAGAAGACCCCC
ACAGGAAAAGCTGATTCTATAATTTAAATGATTTGGGGATCCAATAAGTCATGATTCTATTTTATATAAATTTGGAA
GATGTGGCCAGAGAGCTAACTCTTTTTATTTTATTATTTTCTTTAATTGTTGACGTACTTATAAATACCAGCTATGA
AGCTATAATTTATTGCCACATTGAGTATGTTAAATTGTTAATTTACATAATTTCTGATTCTTATTTCTCCCCCTCTCAAA
TTCAATTTGATAATTTAACATACCTGCTTCTGTGTGTTCCATGGAATGATAAATTTTAAACAGAATTATGAGA
GAATTACATTTCCCAGCTGTAGATCAATTGAGAAACAGTAGAAATGAAAAGGTTAAGAAATCTGCTTCAAAATCTCA
AATGGTCAAAGTCATTGACATTGTAAGCTCTTCTGTTTCGACTCAAGCCTGTTGAGCCCAATGGCCAAGTGAAACCTCCACTCTCAG
ACACTGCATAATCCAGCAAGCTAATTGCCCACCTTAAGGCCCTTGTGAGCCCAATGGCCAAGTGAAACCTCCACTCTCAG
GGAAATTAGGCAACTGCTAAGGTGGTTTTGTCAGTTTTTCAAGACACAGAGATTAGGTTTTTTCAGCCTTATATAGATCTG
TGATCACTAATGATAGTCTGTGCTAATGAAGGTAGTTTTTTGAATCAAATGCATATTGACTTAGGTCTTCAGCGCAGAA
TGTTGATTCACTGTCTGTCATCCCTGTCAAGAGAGCTGCATATGTAATTATGGTTTTTCTTGTGAATAGATTGTCTTTGGG
ACTGTACGCAAATTCATTTCTTCTCATGTTCTTGTCTATCTTTCAACCTCAAATAAATAAATAAATAGAAAAATATCTC
TAAGCACTATGTGTGGGCTGTCAATTCTTTTACATTTAGTGTCTAATGTTTTTAAACAAGTCAGTTTACAGGTAAAGT
TTGCTGTAATAGGATTGAATGTGGGTGTATGTGGTGGTGCTTCAGATCTCTTCTCTGCTTGACCCTTCATGTTGGG
TAATAGTTTTTAAAGCGCTCATGCCAGAAAGTAAACCACAACATAGTCAACTTCTCAAATATCCATGCAATGTAGAAAGT
CCGGGGTCAAGATGATTACTATGTGATCTGCTTAAGTGGGAACAGGGCCATTTCCCTCGCCCTCAACACACTCAGATAC
ATCTCAGCCAACCAACATTTTGCTGTTTGAAAAACATGCGAGACTTTATCTGTCCCTAAAGAGAATGCTTTTCTCCAT
CCCTCTGCTTAATATCTGTGGCTCCATTTAACCCTCCAAGCCAAAGTCCAGTTCTTTTGAAGACTTCAGGCAAAAT
AGGAGCCTCTTATAGTGGGATGAATGCTTTCTATACTGTTTTTGTAAATTTTTGTAAACATTGGCCATATAAATCTCA
TTTATTTTATGGGTCTGAATCTTCACTAGACTAACTGCTTGAGAGAGGAGCATGTATAAATTCATTTTCTATGTTCAAA
TGCTGAAACTGATGTCTATAGAGCTTCAGTATTTGTCCACTGCATAAAATCAGTAAATAAAGGCAGGAAAGTTTGTAC
ATCAAGTAGGACCAAGGGCTAGATCCATTGGGACAATTCACAGGGCTTTTCTTAGCAAGTACATAATAACAACCTCATCAGAATA
GCCCTGACCTGAATCAACTCTGAGCCCCCTACCTAGGCTGTTGTTTTCTTAGCAAGTACATAATAACAACCTCATCAGAATA
GCAGAGATCTTGGTAACAGGTTGCCGTGACACTGATGATGGGAAAATCCTGAACAGGTTTGGACTGGAATCTTGGC
TCACAACCTGTGTGACCTTGGTCAAGATATTTTATCTCTCTGAGCCTCAATTTTCTCTTCTGTTAAATGAGCATAGTGA
AACTTTGTTTCAATGTTTGGTTTTGAAGAGTAAATGAGATGGTAAGTGTGGTGTATGTAGTGAGGAACATAACAATTC
TTGATAGATATTCATTGAATACCTRTAGTACATAGAACATAGAAAGTTCCTGTTATTCCACTCCACCCCCACACACTT
GCCCTTCAGGTCTCAGGTTCTCCTTCTGGTACCCCCAGAAAGATTAAGCCCCCTTTGGCCCTCTATGTGCCTCTTTTAT
AGCATTTAACAACAATATAAATTAATTGATTATGTAACCTTTTTTATTTAATAGCTGTCTCTTGTAGAATATAAGCACATA
AATTCAGGGACTATCTATTAATGAATTTTCTCTAGTGCCTAGTACTTAGGTGGCTCACAGTAAATGCTGATTCAATGG
ATGAATAACTTTTATTCACTGTCTCAGTGTGGCCTTTAATTTAGATTACCCCCAAATTAATCTCCCATCAGGAAGGCTTT
CTTATTCAACTTTCTCATCTCAAGATTAGCAAACTACTCTCTTTCTATTCCCAAATATCTTCTCTCAGTTTCAATAC
CATGATCAGAAAGTACTCTTCTTGAATTTATTTTCTAGACTAGATCTATTTTGGGGTTTTCTTACCAGTGATTGTAAAC
TATTGATGTGGTCTTTTTTCTGTTTTTACTTCTCATATGTGTATCTTCTTCATTAGTCTTCTTCAACAGAT
ACTTTCTGTTGTGACAGCCACTCTTCTAAGCACTATGGAAGGATTTAAAGCTGTGTGAAGCACAGTTATTCCGGTCAAG

203 / 375

GAACCTTAAAAAATAATAACAAGTGCACAAAACATGTGCAAGTTTGACTAAAGTATGAGACTGGAATAAATACCTTATAAA
AACCAGAGCTTCAGTATTTTCCGCGAGTTTTTGGCTCTATTGTATTCTCAACTTTTACTGGTTTTCTCATCAAATAAAT
GTGTTAAAGTATAACTCAGATCATTGCTTAGATGTACTTACTTTTCCAACAAGGCCTTCCCTGAACATCCTATTTACCA
TTGCCAATGCATTCCTCTCCACTAGCGCCATTCTTACCCTCTCTTTCCACATCAATGAATTTTCATAGCACTTGTCACTT
TTTTTCATGCTGTATAATGTATATTAAGATATTGCTTATTGTCTGTCTCCCTTCAATAGAATGTAAGCTCCATGTGGGC
CAGGATGTGTAGTCATTGATGTATCCCTAGAATAAGTGCCCAATTATAGTAGTCATTTGATGGACATTTATTAAATGAA
ATTATGAATGAAGTAGGGATTGGCAGTTATACACTAAGACTCTGGAAAAATGGCCTGAGTTGAATCCTGGCTTTACCAT
TCTTGGCTATATAATCTCATATTATTTACTTTTTCAGCCTTTTCATTTCCAGATGCCCCCTACCTTCTAGGGTTGTTGGGAG
GATGGAATGCATAATACATGTAACCAGCAAGTTCATAGTAACAAAAGTTGACTTTTTTAAAAAGTTAACTTACTCTTCT
TTCTTATATATGTGTAAATCATATTTTATTTTCTCATTTTAAAAAGAAGACAATAACTAAAGGTATTAGCACATAATGA
TTCAAAACATAATATTTCCACATGTGAGTTGAATGACTTTGAGCCAGATAATATGAGTTGAAATCAGTTTAAACAATA
TTAAATCAGCCAAGAGCAGTGTCTCATGCCTGTAATCTCAGCACTTTGGGAGGCTGAGGCAGGTGGATCACTTGAGCTC
AGGAGTTTGAGACCAGCCTGAGCAACGTGGTGAACCCCATCTCTACAAAAAATACAACAACAAAAAATTAGCCAGGTG
TGGTGGCTCATGCTGTAGTCCAGCTACTTGGGGGGCTGAGGCAGGAGGATCACTTGAGCCAGGAGGTCAAGGCTGC
AGCGAATCTGTGTTTGTACCACTGCACCTTTCAGCCTGGACGACACAGACCATGTCTCAAAAAGAAAAAATAGAATAAAA
TCAAATACACACCATTTTTTGAATATGTCCACAGTCTGTGTAGTTTCATCTTGAAAGGACTTCAAGGTCCAATATGCATCA
TGCAGAGAGTTGCTAGGGGCCAGACAAGAGTGACTTGACCATTGGCCTGAGTAGTTAACTATCAGATAACTAGTGAAA
CAATTCGGCTATTTCAACAAACATGTTGCATACATAACGTGTTATGCACAGAGATGACATTTGGTATAATATTATGGCA
ATAAAAGGTGCAGTTCTGCTTGGGGAAGCAATTGTAATATACTGTGAGGAGCTAAGAGTAAAGAAGGGGCCCTTGTA
AATGAGGGGTGGGTGAGTAGGGTAGCAGTTGGCAGAAGACTCACACTGGAATAAATGCTCCTTGACTCGATATTTTTTT
TTTTTCAAAAATGCAGAAGCATTATTGAAGCCCGGATGTTTGGGTTCTATGATAAAATAAAAGATATGGATTTGAGCTGC
TCATTAATTTTTGAAAGAAAAGATCCTAAAAGGTTAGAGACCATGGAGATTTCAAAGTGGCTGACCTTGATTAGATATA
AGTGTAAGTCAGATGGGTATTCTGGGGGGTCCCGACTTTAATACAATTTGAAAGTTTCATGATTATGAGCACCTCTCT
GTGCCTCCTTGGTGGAGAGCTGACCTATGAGTAGTTACTGTGTGAATTAATGAACATCCTTCAGCAAAAAGTTATTAATA
GTAATGTTTGGTAAAAGTCCTTTAGAAGTAGACTGTTATGTGTGTTACTAGTTATAATCAATTAATAACCTGTGATTTG
TAGGAGCAAATGGTCATAGGGATACAGTATACATTTAATCTTGTCTTCAACATCACCGTAGATCCAGGTCTTCT
CAAGACATTGGCTTTGTTCTGAAGCAGCTCCCACGCTCTTCCAGAAATCTCTATGCGGAGCTTGAATGTGGTCAAGAA
GAAGATGTACTGGATGCACATTTCCCTACAGGAGTCTCTTAATAGTCTCCACCCAGTTACAACATATTGCTGTAAATCC
CACACAACAGCTGAAACATCTTTTCTTCATTTCTTTAATTCCTGTAGCATTTGATGTCTCCACCGTGAATTTACATT
TAATTTGAAGTTGTTTTGCATCATTTAATAGTTGTTTCAAGTATGAATGTCTTGCCCTTCCCAAGAAGATTAAAAAAGA
TTCTTTAAGAACAGAGGCTCACTGCGCAGTGCCAGACATAGACATAGAGTAAACCACAACACTACTGACTTCACTTCAAG
CTGACCTAACCATCTTCCAGCGAAGACGGCCAACCTGGTGATAACTCATTCTTCTGATCTGCACTTACTTTATAGAG
GAATAAATACACTGAGTTATTGGGAGTTTGTGAAGGAAGTGACTAGAATTTCAATAAAATAATAAAGTTTGTGTTTGT
TCATTTGTTTTGAAAAGAACTGCTGCATGGCCAAGATATTGAAAATGGAGGCTGGGATTGGACAGGGGTGAAGAATT
GTGTCACAGACTTTGTACTGGA AAAATGTCTGCCTTAATCTAGTGAATAAATATGACTGTTCTTTGAAGTCCTTTT
CCTCCCCGAGTATAAATTCAAATGCTATTCAATTTCTGAGTTGCTGTATTTCTTTAGCCCTTAAGGCATCAACCTTTG
ATGCTTATTTTATAATATTTTCTCTCTTTAGAAGTATCCACATATTAGTAGAATGGAGGTATAAATCCTAATCCAT
AGACTACTCCGAGCTTATTGAAAAGTGAATCTTATTTAGATTCTTTCTTTTATCTGCTCACTGACAGATCTAATGTTAA
CAGAACCTTATTATCATCACAAGGAAGTAGATTAAAAAATACTTTTTCAGTCATTGCTATTCAACAAGTACACTCCATCA
AATCTTGCTAACTTTTTTTTGCAATAACTTTGCTCCTTGGATCCTCTCCAGGCTTTTATCAAAATGGAACCATAC
ATTTGTAACCTCATAATTAAGTTTTGAGTCATTAAGTTCARTTATCTTTAAGGTTAAACATGAATTTGCTGTAA
AAGTTCCATTTGTTTCACTAAAAATYGCAAAATAGTTGTGATTTTCTTTCAGTATCTGTCCAGTTTGATCTTGAAACAA
ACTGCTTAAAACTTTTACAGCCTTCCCTCTTTTTTGGCTTAGCTTTAATAAACCCTTTTAAATATATAACTCAGATCTATA
AATAATCTGAGAAAAAGCAGTGGAAAAACATTGCAGGTATAAAGACTTTTCATGTTGACTATTTTTGGTAAAGATTCTGG
ACATTTGAGTGAAGTCTCTCATGTTTTATTGGTTTTATTTTACTCTGGCACCGCTTATGAAAAAGGGGACTTGAATTACT
AGAGGGTAATTTTCTTTCTTTATTTTATTTATATATTTTTTACTATTTTTTCTTTCAGTTATGTTGTTTATTCAAAC
TTGAAAACATATACAATTTCAAGGCTCTCTAGAGTATATTTACATCATCTGATGAACAACCTTATAATTTTTTAAATTA
GCAATATTTCTCAACCTGTCTCAGCTTTAATATTATAATTAATGTGCACAACCTGAAAACTTTTCTTGCTCATAC'TATA
ATACATTAATAGACCTTAGCAAACAACCTTCTTATTTGAATACCTTGTCTGTCCCTGTCACTCTTCTCATAC'TTAGCCT
CATAACTTTGGTTATAATTTATGTAAATGGTTAATATTATGTTCTCATTGCAAAATGAAAAGTGAGGAAGAGAAATTA
GCCATTTGCCCTAAGGTCAAGTCTGGTAAAATCAACAGAGGCACCTCAGAATACCTCCAAAATCATTTCATGATGCCA
GAACCTTTAAATGCTACAGAAACAAGCTAAAGCGATGCATTTAAATGTGCTTCTATGTAGGGCTTGAGCTGTATCTAA
CTTAAATTAGAGCTCAGCCAACATAGAATCTAGTTTCAGCAATACCTTACAACATGAGATAACCATGATGTTTGTATA
TAAAATGAGATTGCAGAGGAAACACATTTTAAATACCTGAGGTGTGTGCTTAATCTTCTTGATGTATATTAAAAGCTCAG
TACGTGAGAGTAATATGAGGTGATGGGGTTTACTCTTAAAGAGATTACTTAATAAGTGTATTATTTGGAAAAAGATGAAGAT
TTTAGAGGCTATTTAAGAAACCTGGTTCTGGGAAACACAGCCATAACTTAAGAGTTCTTCTTTTACCCTAACCTCCCTTGGA
ATTCCTGCTTTGTCTATAGAACCATTGGTCAAACCAAGGCAAGCAGCACAAATTACATGAACAAAGAATACAACAATAAAAA
CGCGATCCTTAAAGACCTCCCAAGAAGACCAAGAGCTCTCTCTTTAAACCTCTGTAAAATACCTAGGTTCTCAAGTCTT
CCTATGTCTTATTTCTTAACTAATTGCACATCAATTCAAAAATGGAACAAAGGATATTCTACGTATCAGAACCTTTTT
TCCTATACATTAAGAAGAACTTTTCCACATGAATAGGTAATATCACAGTCTAAAGCCAGAGGATGAACCTATGAATT

204/375

CTTCCTATCATATATTTTAAACAAGAAACGTAAATATCTATGACCTACTTATAGCCAATTTATATTTTGCCAGGTTGTT
TTGTTTCTAACTTACCCCTCATATGGCTTAATAATGAAGGCCATAAATGTGCCTCTTTCTATCTCACCCCTATGACT
TGACATGTATTATAAAATGAACCTTCTATATAAAATAATATTTATTGAATGAAAGGAAAGTATTACATACAACTTTCAT
TATTATATTATTAAGCTTATTTTTTGCACATCATRGCTAGATCATCTTAAATAGTTTGGCTCTGTCTCTTTTCCCATT
TTTTTTTTTTTATTATACTTTAAGTTCTAGGGTACGTGAGCACAACGTGAAGGTTCTGTTACATATGTATACATGTGCCAT
GTTGGTGTGCTGCACCCGTTAACTTGTCAATTTACATTACGTATATCTACTAATGCTATCCCTCCCCCTCCCCCACTC
CATGACAGACCCCGGTGTGTGGTGTTCACCCCTGTGTCCAAGTGTCTCATTTGTTCAATTTCCACCTATGATTGAGA
ACATGCAGTGTGTTGGTTTTCTGTCTTGAATAGTTTGTCTCAGAATGATGGTTTCCAGCTTCATCCATGTCCCTACAAA
GGACATGAACCTCATCATTTTTTATGGCTGCATAGTATTCCATGGTGTATATGTGCCACATTTTCTTAATCCAGTCTATC
ATTGATGGACATTTGGGTTGGTTCCAAGTCTTTGCTATTGTGAATAGTGTGCAATAAAACATACATGTGCATGTGTCTT
ATAGCAGCATGATTTATAATCCTTTGGGTATATACCCAGTAATGGGATGGCTGGGTCAAATAGTATTTCTAGTTCAAGA
TCCTTGAGGAATCRCCACACTGTCTTCCACAATGGTTGAACTAGTTTACAGTCCCAACAGTGTAACACTGTTCCTA
TTTCTCCACATCCTCTCTAGCACCTGTTGTTTCTTACTTTTTAATGATTGCCATTTTAACTGGTGTGAGATGATATCT
CATTTGTGGTTTTGATTTGCATTTCTCTGATGGCCAAGTGATGATGAGCATTTTTTCATGTGTCTGTTGGCTGCATAAAT
GTCTTCTTTTGAGAAGTGTCTGTTTCATATCCTTTGCCCACTTTTTGATGTGGTTGTTTGATTTTCTTGTAAATTTGT
TTAAGTTATTTGTAGATTCTGTGTATTAGCTCTTCTCAGATGGGTAGATTATAAAAAATTTTCTCCATTCTGTAGGTT
GCCTGTTCACTCCAATGGTAGTTTCTTCTGTCTGTGCAGAAGCTCTTTAGTTTAAATTAGATCTCATTGTCATTTTGGC
TTTTGTTGCCATTGCTTTTGGTGTTTTAGTCTAAGTCTTGTGCTGTGCTATGTCCTGAATGGTATTGCCCTAGGTTT
TCTTGATAGGTTTTTATAGTTTTAGGTTTACATGAACTTTAAGTTTTAATCCATCTTGAATTAATTTTTGTATAAGGTGTAC
GGAAGAGATCCAGTTTTCAGCTTTCTACATGTGGCTAGCCAGTATTTCCAGCACAATTTATTAAATAGGGAATCCTTTCC
CCATTCTTCTTGTGTGTCAGGTTTGTCAAAGATCAGATGGTTGAAGATGTGTAGTATTATTTCTGAGGGCTCTATTCTG
TTCCATTAGTCTATATCTCTGTTTTGGTACCAGTACCATGCTGTTTTGGTACTGTAGCTTGTAGTATAGTTTGAAGT
CAGGCAGCGTGATGCCTCCAGCTTTGTTCTTTTGGCTTAGGATGTCTTGGCAATGCGGGCTCTTTTTTGGTTCCACAT
AAACTTTAAAGTAGTTTTTTTCCAATTCTGTGAAGAAAGTCAATGGTAGCTTGATGGGGATGGCACTGAATCTATAAAT
TACCTTGGGCAGTGTGGCCATTTTCATGATATTGATTCTTCTATCTATGAGCATGGAATGTTCTTCCATTTGTTTGTG
TCCTCTTTTATTTCTTTGAGCAGTGGTTTGTAAATCTCCTTGAAGAGGTCCTTCCACATCCCTGTAAGTTGGATTCTTA
GGTGTTTTATTTCTTTGAAGCAATTGTGAATTGGAGTTCACTTCKGATTTGGCTGTTTGTCTGTTATTGGTGTATAGG
AATGCTTGTGATTTTTTGCACATTGATTTTGTATCCTGAGACTTTGCTGAAGTTGCTTATCAGATTAAGGAGATTTGGG
CTGAGACGATGGGGTTTTCTAAATATACAATCATGTCACTGCAACAGGGAGAATTTGACTTCCCTCTTTTCTTAATTG
AATACCTTTTATTTCTTTCTCCTGCTGATGCCCCTGGCCAGAACTTCCAATACTATGTTGAATAGGAGTGGTGAGAAA
GGGCATCCCTGTCTTGTGCCAGGTTTCAAAGGGAATGCTTCTAGCTTTTGGCCATTGAGTATGATATTGGCTGTGGGTT
TGTCATAAATAGCTCTTATTATTTTGTAGATACATCCCATCAATRCCTAGTTTATTGAGAGTTTTTGTCTTTGGTTCTGTTTATATGCTGG
TTGAATTTTGTCAAASGCCTTTTCTGCATCTATTGAGAGAATCATGTGGCTTTTGTCTTTGGTTCTGTTTATATGCTGG
ATTACATTTATTGATTGTCATATGTTGAACAGCCCTTGATCCCAAGGGATGAAGCCCACTTGATCATGGTGGATAAGCT
TTTTGATGTGCTGTGGCTTCGGTTTTGCCAGTATTTTTATTAAAGGATATTGTCATCAATGTTTCATCAGGGATATTGGTCT
AAAATCTCTTTTTTTTTTGTGTCTCTGCCAGGCTTTGGTATCAGGATAATGCTGGCCTTATAAAATGAGTTAGGGAGG
ATTCCCTCTTTTTCTATCGATTGGAATAGTTTTCAGAAGGAATGTTACCAGCTCCTTTTTGTATCTCTGGTAGAATTCGG
CTGTGAATCCCTCTGGTCTGGACTTTTTTTGGTGGTAGGCTATTAAATTATTGCCTCAATTTTCAGAGCCTGTTATTGG
TCTATTGAGGGATTCAACTTCTTCTGGTTTATGCTTTGGGAGGGTGTATGTGTCCAGGAATTCATCCATTTCTTCTAGA
TTTTCTAGTTTATTGTCATAGAGGTGTTTATAGTATTCTCTGATAGTAGTTTGTATTTCTGTGGGATCAGTGGTGATAT
CACCTTTATCATTTTTTATTGCGTCTATTTGATTCTTCTCCCTTTCTTCTTTATTAGTCTTGCTAGTGGTCCGTCAATT
TTGTTGATCTTTTCAAATACCAGCTCCTGGATTCAATGATTTTTTGAAGGGTTTTTTTTGTGTCTCTATCTCCTTCAGT
TCTGCTCTGATCTTAGTTWTTTCTTGCCTTCTGTTAGCTTTTGAATGCGTTTGTCTTCTGCTTCTTAGTTCTTTAATT
GTGCTGTTAGGGTGTCAATTTTAGATCTTTCTGCTTTCTCTTGTGGGAATTTAGTGTCTATAAATTTCCCTCTACACAC
TGCTTTAAATATGTCCCAGAGATTCTGGTATGTTGTGTCTTTGTTCTCATGGTTTCAAAGAACATCTTTATTCTGCC
TTCATTTCTGTTAAGTACCCAGTAGTCATTGAGGAGCAGGTTGTTTCAAGTTTCCATGTAGTTGAGCGGTTTTGAGTGAGTT
TCTTAATCCTGAATCTAGTTTGAATGCACTGTGGTCTGAGAGAGCACTGTTGTAATTTCTGTTCTTTAACATTTGCT
GAGGAGTGCTTTACTTCCAATATATGGTCAATTTGGAATAAGTGAATGTGATGTTGAGAAGAATGTATATTCTGTT
GATTTGTGGTGGAGAGTTCTGTAGATGTCTATTAGTCCACTTGGTGAGAGCTGAGTTCAATTCCTGGATAACCTTGT
TAACCTTCTGTCTCGTTGATCTATCCGATGTTGACAGTGGGGTGTACAGTCTCTCTTTATTATTGTGTGGGAGTCTAA
GTCTCTTTGTAAGTCTCTAAGGGCTTGCTTTATGAATCTGGGTGCTCCTGTATTGGGTGCATATATATTAGRATAGTT
AGCTCTTCTTGTGTAATGATCCCTTTACCATTACGTAATGGCCTTCTTTGTCTCTTTTGTATCTTTGTTGGTTTAAAGT
CTGTTTTATCAGAGACTAGGATTGCAACCCACCTTTTTTTTTGTTTTCCATGTGCTTGGTAGATCTTCTTCTCCTCCCTT
TATTTTGAGCCTGTGTGTCTCTGCACGTGAGATGGGTCTCCTGAATACAGCACAGTGGTGGGTCTTGACTCTTTATC
CAATTTGCCAGTTAGCATCTTTTAAATTGGAGCATTAGCCCATTTACATTTAAGGTTAATATTGTTATGTGTGAATTTG
ATCCTGTCAATTATGATGTTAGCTGGTTATTTTGTCTCATTAGTTGATGAGTCTCTTCTTAGCATCGATGGTCTTTACAA
TTTGGCATGTTTTTGCAGTGGTTGGTACTGGTTGTCTTCTTCCATGTTTACACTTCCCTTCAGGAGCTCTTCTAGGCCT
GGTGGTGACAAAATCTCTCAGCATTTGCTTGTCTGTAAAGGATTTTATTTCTCCTTCACTTATGAACTTAGTTTGGCT
GGATATGAAATCTGGGTTGAAAATCTTTAAGAAATGTTGAATATTGGCCCCCACTCTCTTCTGGTTTGTAGAGTTTCT
GCCGAGGGATCAGCTGTTAGTCTGATGGGCTTCCCTTTGTGGGTAACCYGACCTTTCTCTGCTGCTGCCCTTAACATTT

205/375

TTTCCTTCATTTCAACTTTAGTGAATCTGAAAATTATGTGTCTTGGAGTTGCTCTTCTCGAGGAGTATCTTTGTGGCAT
TCTACTAGAGGGTAATTTTCTTTTAGGGTGTATAATTATTTTAAAAATTGATTCATTGGAATATGTTATCAATGTCAA
AACATGAGATAACTTGATGATTATCTCTTTATGAATTTGAGGTGCTGAGTATTTCTTGTTTTCAATTACAGCATTCCTT
TCAAATAGCCAGTCTCATGTTTCTATTTCTCTCTTAGCTGCTTCTTTCTTTAATATTTTGTGTGTAATGAGAACCTCTA
CCAAATGAGTAACCAAAGGGCTGAAGAAAGTTGAACTGTTAAATGGTGTGTTGTTAATTGCTTCTTCAATTACAGAAGG
ATTTTATATGTTGAGTAACATGCCATTTGAAGATTTGACAATTCATCCTCTCTTGGTAACTCCCCAGTCATTTGGTC
TAGATTGATCCATCATCTTTCTCACTTAAGAGCATTTAGTTCTCACCTTCAAATAATCAGCAGATTAATAAGTGGTAC
ATAGTCATCTGTAGGAAGAAAGAAATAAGCTGTACAGTAGAGTGCTCTGTGGGTAAATATTTGTGTGTGAGATATAA
CCTGTGTATATTTATTAATATCAGTGACATTTCTTTGCTTATTCTTTTCACTCAACAGATATTATTGAACAGCTG
CTGTGTACTAGGCATTTGTTTCAATTTTCCCAAATTTCTAAATTTGTGATCATTTCTATTTTAAATGTATTATTAAACAG
GTACTGGTAATGATATATATCTTTATTTCCAGTGGGTTTTGGCAATATAGCATAAAGATCATGAAAGTGGGCTCTAGA
ATCTGAGAGCCTGTGAAAACCTCAGCTCCAACACTTTCTAGTTGTGTGAGCGACTTTAGGCAAGTTAATGAACCTTCCCT
AAGCTCATTTACTTCATCTTTACAATAGGTATAATAATAGTACTTACCTCATGTCCACTATCTAAAGAGTAAATGGGAA
AATATGCAAAGCATATTGCACTGGGCTTGGCAGGCAAGTAATCCCTCAATAGATGTTAAATTTGCTGCTGTTATTAAAT
CATAGTTCTTGTCTAGTTGATTGTTATAATCTTTTTCAGTATTTATTGAACAAATACCTATGAAGTGTACTCAGAGTAA
ACTTGGACAGTGAGAGACACCACATCTGGCCTGTTGTGTCTATAACAAAAGCCTTAAACTGGGCTTGGCAATGGTG
AGGGGAACAGATGCTCTAACTGCCCTTCTAGAATGTGTTTTTCACTATGTGTCTAAGCTGCGATGAATGTCACTAATGTC
ATCTCTCTTTCTATTTTAGGTAAGTACATCACCATTTTGAACCTCTGTGCAGATGGGTAAAGCTTGTGCTGCTGGAACCTT
TTCCTGTTGATTTGCATACTTGGAGGATCTGGATCAGACAGTGTGCTTATCGTGGTCAGAAAATGCCTTTATTTTATTC
AAGCAGAGATCTGGAAGGTAACAGAATTTCCACACATGCTTTCCATCTCTGTTTCAAATCTTTGGCAGAAAAA
ATCTGTTATTTTAAATTAGATAAAATGCTATGTTAAATAATTGAAGATTTAATTTCTTACTCTGTCAATAGAAGGCAGA
GTAGTTTAAAGACTTGAGAAAAGAAAAACAATTTGTTTCTTCTTCTATTAGAAAATCACAAAATCCCTCTCTGAAGTAAACA
TACAAATCTTTGTTTTTCTGCTTTCAAACAGGGAAAAATTTTTTTCAGTGCCTAACAAAACAGGTGTTTCATGATTAGATTA
TTAATGAGAAATAATTTTGTATCAAAATAGAAAAAGTGACAAATGGCCCTGCAAGACCWTGTGTGCATAATATTGTAGAA
GGAATTCCTGTTATGACTAAGAGTTGATGTAGTTAATTTAGTATGTCTAAAGTTGGCTGTAATCTATCACCACAGAAGA
GCTGGAAGAAATGATCTTAAATCACAAAGGATTTAGTAAAGACCTACGTGAGCTGTGAAAGATGATTAACTATGAAAT
AGTTCTCAAAGGAAGTTATAAATTCCTTGCCACTTGTGAAATCTAAAACTACATAGACAGTTATGTTCTRTATTAGAA
AATAAGATTTATCCTGCCTTGGCACAATGTATTGAATTGGCATGTTGTTCTCAGTAACAAAGTCCCAATTTGCTTTCAT
CAGCTTTAATTCCTATTTACTCCATACATACTCTACTCTATGTCTGTAGTCTTGCAGAGTCTTGCAGAGCCCATGCCAA
AATGGGATTAGAAATGCAAGAAATTTAGGAAATGCCCTTGTAGAGGAATATAAGGAGGGAGCCAGTTAAGGCTGAGGGA
AACGTCAAAGCATGATCCAAGTTTGACTCTGAGTAAAGAGGGAGAGAGAATTGGTGAGAGCATCCTTGATTGGGCTAG
CCAAAGGCATATGGGAGTCTCTCAAGCCAAAATCAGCCATCAGAGGAATCCTGTTTCCCAGGAATGTGTCTGCCACAACA
TGCCCTCTGTGCTCAGTAAATACCAGGAAGCAGGGCATGGGAGGTATGGCCTTAGCTAAAATGTTGCAGTGAATTTAG
AGGCATCAGTTGGGGCCCTTTGCTGTTATAGTTCTTATAGTTGGAGGTCTGCAGCATATCCTCACGGCCCCACACAGA
GACTGTTAGATCTTGGTTCTTTCTGTTCTTATTTTCTATTACAATGCCTTCTATCTCCACATCTTACTCATTCCTTCAT
GCCCAAATCAGTTACCACTTCTTCTCATGAAGGTTACTCTGTACAACCTAGTGGCTAATAAATTACCACTTCTCTTTTGTAA
TTCAAAAATCTTGTATTTTCTGTGATATTTATGTTTTTGTATATCCATTTATTTCAAAAAATGGTATCGAGAGCTG
CATTTGTGCTAGCCACTTTTCTATGCTCTGTGGGGGAGAGGATCAGAAAAAATGATAAAACATGACAGTCTAATGGAA
AAGATAATACTGTAGAATAACATTAAATATGACAGAAATGTTTGAAGTATGAGCAAAAGATATGAGGAGACAGAAGAAG
GAAGAATAACCTTTTGGGAAAGAGGGAGGGCAGTGCTCAGGGAGGGATGGAGGATTTAAGCAGGACTTGACATTGAG
TTTTGTCTTGGAGGGTGACTAGCTCGTTAGGAGTTGACAGTTGAATAGGCATCATTTTCAAGTTTCATGGTTATATGAAG
GAGCATAGAAAAGGTTTGTAGTACAGAGAGCCTTGCATGTCATAGGGAATTTATGGGATTACGGTCAAAGAGAAATCTG
CAAAATTGGCCTAAAGCCAGATTATATGGGGCATCGGGCTTGGCAAGTAGTTTGGACTTTATTTCTATGAGCAATCC
AATTGAGAACATCTCAGAGTCATGTGGGCCAGGCTGAATGACAAAAAATTTGATGTATATAAATCTGTTATGGCATACT
AAAATGGTATGATTCTACCAAACAAAAAGATGGTGATATATTTAAATATGTTGTCTATATCTAAAACTACTA
ATAAATGACAAATGAAGAAATCACATTTTGATAAAAGAGAGATAAAAAATATAGGGCATAAGGCCAAAATGTAATGGAACGA
TTTAGCAGACTCTTAATCTCAGGTGTGAGATTTGTCCAGAAATAGCTATTTTCTGCTCGATATATATTTACTTTCTGTAC
AGTGTGGTTATAAAGACATAACTGAAAAATCTAGTTGTCTCGAAATATGTAAGGTATCAAAAAGCAGGATTTTATGCT
GAGTGTGCTTTATAATATTTGGAAAATAGTTATAACTAGTTGAAGCATTCACCAGAATGTCACCTTGACAATTTCTAACTT
TAAATATCTATAAGCCATAAAGTTAATATATATATGATTTTGAATTTTAAATTTGATGTAATTTTCAAGATTTACTGTAA
AGTGGCAAGAATAGCACAAAGGAATTTCCAGATACCCCTCACCAATATCCCCCAAATGTTAACATTTTACTACATTTACT
TTATTCAATCTCTGTCTCTCATATCTACCTTTCTGTCTATCTAATCATCTATGTATCCGTCTACCCATACACACGTTTC
CTTATTGATACACATTAAGAGCAAGTTGCAGACATGATACTCCTTTGCTTCTAAATACCTTAAATAATTTCTAAAAACAT
GGAATTATCATACATAGGTACAGTTTCAGTGGTTAAATTTAGCAAAATTAACATGGATAAAATGTTGTTATCTAATCTACA
GACTTTATTCTAAATTTCAATAATTTGTCCCAATAATGTTCTGTGTAGCCAATGAAATTACAAAATCATGCTTTTCAATC
AGTTGTCTAGTCTCTTTAATATCCTTTAACTGGAGCAGTTTCTGAGTCTTCGTGAAAGACTATTTTCATGACATTTATA
TTTTTGGAGAATTACATGCCAATTTGTTGTACACTCTCTTGATTTATTTGGGCTGCTATAACAACTACCATAGTCTT
CATGGTTTATAAACACAGAAATTTATTTCTCATGGTTCTGGAGGCTGAGAAATCCCATGATCTGTGCTAAGCAGATTT
TCTGTCTGGTGAGGATCAGCTTTCTAGCTCATAAATAGCTGTCTCCTTGTCTGTGTTTTTACATGGCAGAAAGGAAGAGA
GAGTTCTCTGGGGTCTCTTTTATAAGGGCATTAAATCCCATTCATGAGGGCTCTGTCCCATAAATCTCATCACTTCCAAA

206/375

AGGCCACACCTGTAAATACCATCATATTGCTGATTAAGTTTCAACATATGAATTTGGAGGCAACGTAAACATTTCAGTCT
AAAGCATAGACTATCTTTCAATTTGAGTTTATTTTGTGTTTCTGGGGATGATAGTCAGGTCATACAACTTGGGCAGGA
ATATCACAGTAGGGATGCTAAGTCCCTTATATCCAGAGGTAGATGCTGTTGTTTAGTACCATTACTGACAATTTTAGCTT
TGATCATTTAGTTCAAGTGGTGCCACCAGATTTCTCCACTGTAAAGTTACTATTTTCTCCTTTGTAATTAAGCA
TTTTGTACCATGATAATATGAGAGCATGTAAATATGCTGTTATTCCTCAATTTCTTACCCAATAGCTTTGGAATCCGTT
GGTGATTCCTGTCTAAATCAGTTACTTGTGTTATTATGATGGTTGCTGTTTCATTGGTTTAAATGCTGCCGTAACAGAT
ACCACAACTGGGTAATTTATAATGAATAGAATTTATTTGGCTCATGGTTCTGGAGGCTGAGAAGTTTCAGGATCAAGGG
GCTGCATCTGGTGCAGTCCCTTTTCTGCTGCATCATGACATGATGAAAGGTATCACATGGGCAAGAAATAGGGAGAAG
GGGGCCAACTCATTTTTTTTTTTTTTTTTTTTTTGGAGACAGAGTCTCGCTCTGTCAACCCAGGCTGGAGTGCAGTGACTC
CGCCTCGGCTCACTGCAACCTCCACCTCCCGGGTTCCGCAATTCTCCTGCCTCAGTTTCCCAGTAGCTGGGACTACAGG
CACCACCACCACGCCCCGCTAATTTTTTGTATTTTGTGTTTAGTAGAGACGGGGTTTACCCTGTTAGCCAGGACGGTCT
CCATCTGCTGACCTCGTGAGCCACCCACCTTAGCCTCCCAAAGTGCTGGGATTACAGGCCTTAGCCACCGCACCTGGCC
CAAACCTATTCTTTTATAAGGAACCTACTCCTATGATAACAGATAAAGTAATCCATTATGAAGGGAATGCTCTCATGA
TCTAATCATCTCTTAAATGTCCCAACTCTTAACACTGTTGCGTTTGGTCTAAGCTTCCAAGATGTGAACTTTGGGAGA
CATATTCAAACCATATGGTTTGTCTAAGGGGAAATCTTGTAATTCATCATTTCTTCTCTTTTATTAGTTGGCTTTCT
ATTATGCATAAAATGTTTCTTCGTGCTTGTCTGTGTGGAGTCATGAATCTTTATTTAGCAGGTTGTTATCCTTTA
ATATTGTTGGTTAATATCATTATTTATCTTAATCCTCATACTGTCTGGATTGGACAGTACAAGGTACTTCTAGTTGA
CTCCCTTGTCAATTTAACACGTTACTATCATTTCTTGAGTACTTTTTTACTTTTTTGGTTTTAGATATGAGACTCTTGT
CTTTTATCCAAGCCTTGAATCAGCTACTTTTATAGGGCTCTCTGTTTCCCTTCAGTAAAGAATGGTTTTTAGAAATCA
AAATTTGGAGAGTAGGTGTGCTTTGCTTCTAGGTCCCTTTAGTAGACATATCTAGGGGGAAGTGATGTATGTACAT
ACTCATATATAAATGTGTGCATATATATGCATACCCACACATACCTATATCCATGGGTATATTCAGATATTTGTATACA
TTAAACCTAGGATTTACAAATGATAATCCATCATTCAGTGCTCATTCTGTTCTTCTCCATTTTCGTATCTGTAACTCT
GTGAGAAGTTACGGTGAGAAGCCTGGCTCCCATTTATCACAAATATATATATATGATAGGATTTCTTCTTACCTGTGGA
ATGTGGTTTCAAAAATTACTTTGAGAATTAACCACTCACGCTCTATGGAAAAAGAGAAGTAAGGCAAGAAAAGTATT
TCAGTAAGTAGACTTTTAGCATTATTTATGTTTTATATGCCCTAATCTGTACTCAAAATTCACCTTGGTTAGTTCTTTTC
TCACAGCCACTTCCACTCACCTTCACGGTTCTGTTACTTATTTTAAATATGGATCAGTTAATTTGTTTTAATATATAAAT
TTGTTTTCATCTAGAGTTGAATCGATTAACTCGGAATGATATTTTCTGTTTCTATGTTTTAAATATCAACTAATAATTT
CCTTTCCTTAATAAAGAAATCTCTAGCACCACTTTAAGACTCAGTTAAGTGGGTGTAGGTATCCATGTTTTCTTAGA
GTATAGAGCTGTGATCTAAATCAGAAAATCTGAACAAGTTTGTCTTGGACCAAACTTCAGGATAATCTGGAAACAACGG
GACAAATGTTAGTGATGATGATTTTCAACATAGTTCTGAGTAAATCCAAATGCATATGTGGGTTTGTGGCTCTTCA
TATCTGGTTATTTGTACATGATCACATCTTTATTTAGTATAATAAAGTTGGGTATAAAGCAATGCCATTAAATTATGT
ATTTTATATGCTTTTTGTTTTCAAAAAGGAATTAAGCAATCCTAACTTTAAATGGATAAAATGCCATGTAAAGCTA
AGTTAGAAACACAAATGTAAAGTGTATTTCTGACTTGGAGTTAAGTTTAGGTCTTAAATATTAATAGCTTCTCCTAAA
GATACAGCAAATAGAGAAACCTGATAATATTTATGTCTTGAGAGAAAATTATCTTTCTATAATTAATTATAAGACTTTT
CATTAGGGTCTTTGTGTAAAGTAAAGCAATAATATGTTTAAATAGTATTTTTATGTGAGTTACATACATGTACATTATTA
ATCATGAATAAATAGTGATGTTCTTATACTTAGTCTTGTATAAGTCAAAATATTAATCATTATTCATGAAAGTCTT
CATATAGTAATTTAAATCATTGTTAAGTCTGGTTACTTGATGTTGAGAAAGAGCTTAGTACACATAGTAGAATGACTTG
CCAGCCTTGCCATTAGGTTATCTTTCTCATACATTACTTACCTTAAGTTGGCAGGAGCTTGATTACAGAAGATACTGT
CATTTATCTCTTTGTGTGGAGTGCATATATTGTGGGATGTCTATAGGAGTATTACCCAAAGGGTTTGATTACAGAATTT
ATAGTTAACAAATCACTAGGAAATGTTTATGGAGGGAAGATAACCAAGATATATCTGATTACCTATTTGGAGGACTA
GCAGTGGAAATTTCTTGCTGTTTCTCATGTGGCCAAAATAAATAAATAAATTTAGAAAGAGTTTGTGTACCAA
GATAATCCATATATTTAGTTGGTATGGAAAAACATCTTTCTTTCAGCCATTGTTACTATGACACTTAGACACTCTAG
TCTACAAAATTATCCTAGGTTTAGCAATATTGGAATTAATTTTATTGTTTCTTCTGATTGCAGAGTTATAAAAATAA
GGATTGAGTTATTATGAGAGGCCGATTGTGTAATACATATCATGAGTTAAAAGTAAACGTTGACTTTTATTATAATTGC
CTTTTGCCACATGAGAGAAAATAAACTAAGTGAATAAGACTGTCTCTAAGTCTTCTCTGAGATTAAATTTGACAATTTAC
TAGAAATAGAAAGATTGGTAATGCTCAGTCTAGGAAAGGGGTAAAGAAACAGGCACACATATATTACTTGAGAGATTGT
AAATTTTGTACAGTTACAATGGTAACACTCCATGTCAAATATGCATATAACAATGCCTCTTGTAGACATTTATCCTCA
AGTAACAAGAAGTAGGCAAGATTATTTTATGTATTTTGACCGTCAATGAGTTGATAATAGTAAAGGACTAGGGAGGGT
TGGTGTTTAAAAACAGGCCAGGTGCGGTGGCTCACACCTGTAATCCAGCACTTTGGGAGGCAAGGCGGATCACTTGAG
GTCAGAAATTTAAGACCAGCTGACCAACATGGTGAACTCCATCTCTACTAAAAATACAGAAATATCCAGGCACCTGTG
GCAGGTGCCTATAATCCAGCTACTCAGGCGCTGAGGCAGGAGAAGTGCTTGAACCCCAAGGTTAGAGGTTGCAGTGA
GCCGAAATGGTGCCTGCACTCCAGCCTGGGTGACAGAGCCAGACTACATCTCAAAAACAAACAAAAAATAAAACAG
ACTAAATGTGGTACTTCCATATTTTTTTTAAATGATAGAGATATTAGCATTGAAATTTGTACAAAACATACACATAATG
TAATCTTTACACATTTTTTAAGTATATGGGCTAAAGTATGAAACCACTCTGAGTAATAGGATTATAAATATTCTTTAT
CTCCTGTATTTATATTTATTTATACCTTAATTAATTTTGAATAATGTTGTTACTTTTACAAATAAGAAGTTGTGAAA
AACTATTACCATGAAAATAATCTAGCAAGAAATTTGATTTAACATTGCTCATTTCTTGAAAGCATGATTTTATCATT
TTTACTCTTTTGTAGACTGAGTTTAAAGTATTTGATCAATTTGATGAGGATGAGTTTATCATTTTTAGTGCCTTGCTGAT
TTGTGCAGGCACCTCAGTTTTAAGTAAATCATGGGATTTATTTATTTGTTGATTTTAGCATTGTTTCTAGTACTTATGTGCTT
AATAGCACTTGAACATACAAAGAGAAATGAGATTTTTGGTCCCCAAGAAATTAATAATGGAGGAGATAATCATAA
ACTTACAGAGAAGTATATGATAGGCTGTGTCAAAGTGGGAACAATGTAGACTAGGGAAATACAATGCTTCTCTTGGATG

207/375

[illegible]

208/375

TACACTCGTGAAGGTGGAGTGGAAAGACTTCTTTATAGGAGTATGATTTCATGTTTATAAAATTGGAGACACTTAGAAAGT
TGAGTTAAAAGTGACTCAAAGGATATCTTTTCATTGCCCTTTTTATAGATGGAAAAACATGGATGTAGCTGTTTCATAC
AGCTAAGACACTAGTGCATCAAAACACAATACATTTGTGAGACATCTTGTTATGATTTCAAAGCAGTTTGTCAATAAAT
GTGTATGTTCAATGGTTACAGTTTGGGATGGTAAGACATCATCAGCTCAGAATAGTAACATCCTTCCCTTTATCTTTTT
TATAGAACTTTAAACCTGGATGCAATTTTAAGATCATATGCATCATTTTTTCTATATGGTGATTACATTCTAGATAAAT
TAATTTGTGATACACTCTGGACTTTTTTATTACATCAAGTTGAAGTTTCCCTTTGTGGACTTAGAAACAAAAAATTG
CAGTAATAAAAAATGAAAAGAGATTATGCAAAAAATAATTACTAATGACCATGTTTCTTAGGTGATGAATTTAATTGAGTG
TTGGTATTTTAAGAATACGTGCATCAAGCAAATTATAATGTAACCAAATATCCAGAGATTTGAGGAGGAATATCAGGTT
ATTATCACATTTTCAGAGCTGAATTTTTCTTCTTTGGTTTCATTGACTGCATTGAATCCTTTGTTTGTGGTTCCTATAATAATTA
TTTTTCATTTTCATTCCCTTGCTCTAGGAGTGACTCTGGGGAATCATTAGGTACATGCTTGTGGTTTTCCATAATAATTA
TCTCTGAGCCCTAATGGTTTCTGGATTGGCCCTCTCTTCACTTTCTCCAACCTTAGGCAGGAGTTTCAAGATGGCCTTCA
GTTGCAAGAGAGATATAAATCCAACCTTACCATCTAGTCTCTTCTGTGTGGTCTTGGCAAATTTTTAATCCTGGCTA
GGCATGCTGTTACTGGCAGAAATGAGGTTCTGCCTCAACTTTAGCTCCAGCCCTGCCGTTAGCCTGAAGACTTTCCAAG
ATTTAGGGAGGGTCCATGAATATCTCATCTTCAAGAGTGTGCTATAGAGTTATCGAGCAACTCAGATCTTTTAAAAATC
TTGAGTTTAGGAATCATACATTTAAATGTCAAGTTCTCTAGAAAATGAAGATTTAATCCTTTAGAAAAAAATCTAGGG
ACAAGGAATTTAGCATTTTAAATGTTTAAAGATTCCATCATAAGTGTGCTTTAATGTAAAGGGTTTCTTTGAAAAAATAT
TTCTTTACTTTTTTTTTTTTTTCTTGAGACAGGGTCTCCCTTTGTCAACCAGGCTGGAGTGGAGTGGTATGATCATG
GCTCTGCGAGCCTCTACTTGTCTGGGCTCCAGTGATCTCCACCTCAGCCTCTCAAATAGCTGGGACTACGGGCTCACA
CCACCACACCTGTCTCATTTTTTGTATTTTTTGTAGAGAAGGGGTTTGGACATGTTACCCAGGCTGGTCTTGAATCTTG
GGCTCAAGTAGTCTTCTGCCTCCATCTCCGAAGTGTGGGATTACAGGTGTGAGTGCATGCCTGGCTGTAAAATT
GTATTATATTTCTAATATGAAGAAATACTTGGTTTCTCTTTACTGTTTAGAAAGATAATTATCATGATTGTTTCTTTA
TTAATCCTTATATGATACTTTGTATTTTTATCCCCTGCTACTCACCCCAAGCTTATTTTTATAATTAGAAAGGAATCAA
GCTAGCCAAACAGGAGTTATCCTTCTTAAGGTAGAGAAGTTACTRTTTTTTTCAAATGGCGATCTGCCTGCCTGAGT
TGCTATTTGGATCTCTGATGATTTCTTCTTTGATCCCCTAACTCAAAGCAGGCAATCAAGGCTATGCTGTTAGTTGTA
ACCAGATGGAAACCTGATCTCCATTTATACTTTGCCTCTTGTATTGATAACAGGACATGAACCAGGATAGATACACTAA
CAGTATTTGACTCTGCTGCAGTTGCCAGGCTAAATAACCAGAACTCATATCTCATTTACTTACTTACCTATGGAACACTC
TGTATAATGAAAATGTGTGTTGAAAGTGTGTGGGTATATGTTGTGTGTATATGCATTAAAAATTTCTATTAGCATGGGCT
GGTTGTAATAGTGCATACCTGTTATCCCACTACTTGGGATGCTGAGGCAGGAGGATCATTTGAACCCAGAGTTCAAGG
CCAGCCTGGGTAAACACAGCAAGACCGCCATCTATTTAAAAAAGTAAAAACTCTCATGAGAATAATAATTAAAGT
AGCTATGTTGATCATTTGCAGTAATTAACCAAAATATTAATACTCATACCTGATATAGTTTTTCCACTTTATTATAAT
TACATTTCTCTCAAAAAATTAAGAATTAGTATGTTTAAACATATACAGGTTGAATATCTCTTATTGTAAATGCCTGG
GACCAGAAGTRTTTCAACCTTTGAATTTTTTTTTTGGATTTTGGAATACATGCATACACATAGTGAGATATCTTGGGGA
TAAGACCTTCATCTAAACACAAAAATTTATTTATGTTTCGTATATRCCTTATAAACATAGGCTGAAAATAATTGTATACA
ATATTTTAAAAATGCTTTTCGTACGTGAAACAAAGTTTGGCTGTGTTTTGACTATGACTTGTGCATGAGGTGAGGTGTG
GAATTTTCCACCTGTGACATCATGTCAGCACTCAAAAAGTTTGGATTGTGGAACATTTTGCATTTTGGATTTTCAGAT
TAATGATGCTTAACCTACCTTGTGAAATAATGGAGTCTTTTATTAATAACAAAACAATAATAGATGATACTTACAGAGT
ACTTGTGTGTCAGGCTCTACTCTAAACATTTTATATGTATTAAACCAATTAATCTTCACAAAACCTCTGAATTAGATAT
ATTATTATTATTTCATATTTTAGAGGAGAAAACCTGAGAAACAAGTAATCTAGTCTGTACTCTACCATAATGCTATGTT
ACATTCTATCAACACTCCCACTGCCTCTTCTGAATTCATTGATAGTGGTGTGGTGGCATAGAGTCCACAGAGTGGAGCA
TTAATTAATTTTGCATAATGTGAAAGTAAACCTTAAGAAAATTTTAAGGAATAGACAGTGTGCAGTGTATGAAATCAT
AACTATACAATTAAGGGGTTAAATGAAATCATGCCCAAAATGCTGTGTTTTAAATGGTGGCACTGACTGATAAAAATGTA
GATTTGAGTTATTTATTGTTTTCTACATTTCTCAAGTGAAAAAGGAAGAAAGTAGGAATAAAATCTGGACTATTGGGGG
GGTGCTTTAGTCTTGCAAAAAGTAAAAATAGAAATAGAAAGAAAGTTTTTATGGTTTCATATTGTAACATCAAAATATG
GAATGAAAACGTGGTCTCCCATGAAGTATTTAGGTGCTGGAAGGAAATCTCCTAGACTAGGACTCTCAGCAAGTCCA
TGGTTCCCTATTATGTCCAGCATGCCATAGAAAAACTCCAGAATTAGTTAAATWTTAATAATTTAATGGAGAAAATAAT
TTTTCAAGGGGCAGCTAGTTAACTTCAGCATGAGTCAAAAAGCACTTCATCTGTCAATATTTATGTAAATATTTATTTT
GAATTATACATTTATTTAGAGTATTTTATTTACATTAGAAATAGAGGGAACCTAAGGCCGGGCACGGTGAATGCCTGTA
ATCCCAGCATTTTGGGAGGCGAGGCGGACAGATAACCTGAGGTGGGAGTTTGGAGCCAGCATGACCAACATGGAGAA
CCATGTATCTACCAAAATACAAAATTAGCCGGGTGTGGTGGCAGATGCCTGTAATCCCAGCTACTTTTGGGAGGCTGA
GGCAGGAGAATTGGCTTGAACCTGGGAGGTGGAGGTTGTGGTGGCAGAGGTTGCAGTGAGCCAAGATCGTGCCATTGCA
CTCCAGCCTGAGCAACAAGAGCGAACTCCATCTCAAAAATAAAGAATAAAGGGAACCTAGCCATCTGATCATATTACAA
CCAAAGCCTTTTATTTTCTTACATAACCTAACTGAATGTGTCAAACAGTTTGTGATTCTGTCTCCAAATATGCATGTAT
ATTCCAAAAGAATCTGTGACCTCAGTAGGCCTGTTTTAAGTCAAGTGAACCTAATTTCTTTCTTTCTTCTTCTTCT
TCT
CTTCT
TCT
TGCAGTGGTGAATCATGGCTCACTGCAGCCCCAACTCCTGGACCGAAGTGATCCTCCTGCCTCAGCCTCTGAGTAGC
TGGGACTACAGGCATGGGCCACCATGTCTAGCTATTGTTTTAAATTTGTAGAGAAAAGATCTCACTGTTGCTCAGG
CTGGTCTTGAACCTTTTGAACCTCAACCAATCCTCCAGCCTTGGCCTCCCAAGTTCTGGAGTTACAGGCATGAGCCACCA
TACCTGCTAACTAATTTCTGAAAGATAAGTCATAGTATTGACCATAATAGTGATGAAAATAAGTGGAATCCAGGAGGAA

Fig. 6.25

209/375

GCCTCATCTGCATGTGGTGAATATGTAACAGTAAAGAGGATGATCATAGTAAGGCTTTCTACTGTGCATAGCATGTTAG
CTTTTACTCTTGCTTTTACATATTCATCTCATTTAAAGTTTTTGCTCATTTTAATTATTCTATGATAGATATGACAGAG
GCAGGGAAAGTATTATCCTCTTCTCCCTTTACTCCCAATTACAGAGGAGTACCTGAATCCCACAGAATTGACATATTTT
CTCAATATCAGTTAGTCAACATCAAAGAGACTTGAAGTCTATAGTCATTATATGCAGTCTTAAGGACACACTCTCCAC
ATTTTAAAGTTTAAAGGATGGATAGGATTTCCACAGAAGTATAAACAGAAAAATTGAAGACAGAGGAAAGAATACTGGAC
AAGGGCAAAAAACAGGAAGTATGGTACAACCTGGAGAAAAATGCCAGTGAGCTGCTAAGCTCAGGTACAGGATGAAGAG
AATTAGCAGGCAGATGTTGATGGAATGCCGCAGGAAGATCCATCTTGAATGGTTTCGTGGGAACATAGACTGGATGTGT
GATCTAAGAAATATAAGACTAGTGGGTTAGACTCAGCAAGGGGTAATGTGGAGCTAAGTTTGATGACTATAGATATGGA
AAGACTCAGGGACAGATGCTACAGAAATTTCAAAGTTTTGATACCATATTACACAACTAATATGGCGCTTGAAAAAGA
GTGAGACATCTAAGATGATTCTCAGGTTCTGGGTCTGAATGACTGGGAGAATAATGATCCAGGAACAGAAATAGGGAAAT
CATGAGAAGATGCTAAATTTGGGAGGAGATGCTGGGTGTGATTTGCTGAGTTTGAGTACAAGCAGACCATGCAAGTAGTT
ATGTCTAACTTTGGAAGCAAAGTAATGGTGTGCACCTGTAGTCCAGATATTCTGGAGGCTGAGGTGGGAGGATCAATTG
AGCCCAGGAGGTCAAGGCTGCAGTGAGCCATGATCCACCACCTAGCATTCTAGCCTGAGCGACAGAGTGAGACTCTGTCT
CAAAAAATGTAATGCAATGCAATGCAATGCAAGCAGCAACACAGCAAAACACAACACAACAATAAAAAATAATGCCTTCA
GAACCTCCCCCCCCAAAAAAATTTCTAGGAGGGAAGTGGGGTAAGCCTAGTGAAAATTCTCAGGCTAACTGACAATGTG
TATGTTTTTGCTAAATGGACTTCAGTTGGCAAATCAAATTTTTGAGTTAGACATTAATAATATTGAAATGTAATATCCAC
CCACATTGTCCATTTTCATAGAAATTACTCTGTTTTTGTGTTTTCATTTTGACATTTCTAAGCTGTCACTTGACCCAGACT
GACACATTATCATCTGCATGCACCTAGGCTCTGCCTTATATATGTTTACAACATGCAATGAAGCCTAGTGCTGTAAATC
AGAAAGAGGGTGCTGCAGTCCATCATGTGAAAAAGAGCTGGACTATGAATGAGGAAAAGAGATTTTACTCTGACATCAA
GGCTGGCCGACAGCATCTGTCTATGCCCTAACACAATCATGCTAATTATAAGCCATCACTTTCATTCTCTTGGAAATTC
AGAAGTCAGGAGGGTGTAGGGGCAAATTTCTAACGGGTGTGGAATCTATCATTGCTAGGACCTTTTACAATTCAGTT
GCTTACTCTTTTTTAAATCTGCCATTGAGCAGTCTTTTTTTCAGTACCAGTAAGCCACGCTATGCATTCCTATGAATAAAG
TGCACAGCAACAGCATCCAAATGCAGTGACGGAAGTGTATGGCTTCTCCTTGGAAATAGCTTTTAAAAACCTGCTTAGGC
AGGGACACTTTATTGCTTGCTGAAAAATTTCAAAGATTTTGTGACTATGTTTAAATAAATATCAAGAACTATATAGAAT
TCCTTAGACCTTTTTTTCTAAATAAACTTTTGGAGATTTTTTGTGTTGTTGTTTACTATTATTTTATAGAGAAAGGAC
AATTAAATTATCTTCAGATCCCAGGGAATGGTAGAATTAGTCTTTTTTGGCACTGATAGTAAGGTAGGTATGTCTTAGT
CCATTTGGACTGTTACAATAAAATATCATAAACTCTGTAGCATGGCTGGGCACAGTGGTTCACGGCTGTAATCTCAGCA
CTTTGGAAGGCCGAGGCCGGTGGATCACCTGAGGTGAGGAGTTCGAGACCAGCCTGGGCAACATGGCGAAACCCCATCT
CTACTAAAAATACAATAATTAGCCGGGCATGGTGGCGCATGCTGTAGTCCCAGCTACTCGGGAGTCTGAGGCAGGAGA
ATCGCTTGAACCCAGGAGGCAGAGCTTGCAGTGAGCAGAGATTGTCCCACTGCACTCCAGCCTGGCCGACAGAGGGAGA
CTCTGTCTCAAAAACAAAACAAAACCTGGGTAGCTTATAAAACAATAGAAATTTATTTCTCATAGTGCTGGAGGCTGGGG
AGTCCAAAGTCAGCATGCTACAGATTTGGTGTCTGGTGAGGGCCAGGTTTCTGGTTCATTAATGGTGTCTTCTTGCTGT
GTCCTCACTTGGAGAAGAGGGGCAAGGGAGCTATAACTTGAAGAAGGGGCTCTTTAATATGTGCATTAACTCTGTTC
CAAGGCTGGAGGCCTAATGACCTAATTACCTCCCAAAGGCCCTACCTCCTAACACTATTGCATTGGTGATTAGATTTC
ACATTTGAATTTTGGGAGGGTGCCAATGTTTCAGATCATAGCTGGTCATTTTCAGCTTATTTGTACTCTCTAAGTTATGCT
GCAATAATTGTTGGCTTCTGTACATGGGCAATATGGAATTAAGCAATCATAACATTTTGGTAGAGGACCTGAGGAGA
GATTATTCTGAATGTGATGAAGTTATAGTCTTTTTCTCAGGTGGATTAGATCACTTTTTTGGATAGAAATTTTATGTTG
GGAAAAATAAAATGGTTTCAGTGACCTGAGGCAGAAAAAGTCTGTTTACAGGAATATAAGATAATTACTCCATCAACTC
ACAGTTGTTTGGAAATGTCAGGATCAATAATAGTCTCAGAACATTGTAACCTTACTCCAGCAACTATGCTAACATAAAG
CAGAGAAGTCTGAAGTCTGTCCATTAGTATTGGTGACAAGGTCATGGTTGCTTTTAACTTTGCTTGCCAAAATACCTG
GAGGGAAGTCAATGTGCATACTCAAGTTTCTGCTGTGGCAAATGACTGTTGCTACCCAGGAGACCTTAGGAAGACAA
TCAGTTTCATGTCTGACTGGAGACATTGCAACTTTATTTGTATGAACATTTGGGTCAAATTTAGGGGGACATGTCACT
ACAGAGGGGCAGAGGGTCATGATAATGAAAAGAAATCATTACGTTATATTGGTAATTAGATGTATGACTATCAACAAATG
TTTTTCTTGGGTGTTAGTAACATTTCTTTTGGAGATAGATGGCAATTTTACAAAGTCTATCCAGAGAACTGGAAGTA
TCTAAAGATAATGATAATGACGAGAATATATTCATTGTAATCTGGCATACAGAAATTTTCTCTGCCATTTAAGAAGCTGA
ATTTCTTTTAAAGTATAGAAAGGTTAGACTTATCAACCTTATTTTGCGAGATACTATTTATGTTTTTCTCTCTG
TCCTTAAATATTTTCTGAGATTTAGGCACTGAGCTCTCTGCTAGACATTTTCAAATTTTATCTTTTAAAAAATCAGAAA
ACCTCTCTTTATGAATGAAATTTTTTCAAAAACCTCTGATATATAAAACAGGCAAAATGAAACCATTATGGCAGGAATGA
GTCTGGGATTTGCCATTTTATTTTTCTTTCTTTCTCTGCTGCTGCTAAATTTTCTACAAGCAAGGCAAGCAGTTTCAT
GAATCAACTGTTGACTACTTCTGAAACCTAAATGAAATAATATATAATGAAGCTGTTATTTCAGTGATTTTACTTATC
AAAATATACTTGTCAAATATTAACGTATTTGTGTTTGTCAAATAAATATATTATACATAGCACCTTGGTAAATCAC
AGATCTAGTTGTATTGTAGGTGCCATAGACCAACATGACAACCTTGATTATATGGCTTGAGATATTTACATCACTCTTACC
ACAAAAACGTCAATAAACAGAGCTTATTAATCTTTTGGAGGAGGAAATGAAGGTGTAGGAAAGCATGTATGAAGTTC
TACAGCATTTGTATACATCCATCTTTGGGAAGTGTGAGTGAGCAAAAAAGAATAAATGTTGATATTAGCATGAAAACTCT
CACTAACTCTATAAAATTTCTTGTCAATATTAGGCCTGTTTCTAAAGCCAATCAGAATGAAGGAAGAGCTTTTAAAAAT
AGGCAATGTTGGTTACATTGGCTTCAATTTTAAAAACAAAGTTCTACATTCTCTTCAGAATGCCAAGGAGGTGAAAAA
GGAGGCATTTCTGTCATATATTTTGGAGATGAGACGAGGGTGAGAAAAGGAGTAGAGCTGAATGTTATGTTATTCTGTTA
ACCTTTGTGTCAGGCCCATCAGGCTTTATATGGTTCAAATTTCTGCTGTATATTTTGATACTTTCTGTCTCCACAGCAGTT
ACTCAGGAATATATCCCAATAATGACACTGAAAATGCAGTGAATTTATAAATAGATCCCGCTGCTGCATAGATTCCATT
ATTTAGAAAATTATACAGSGTTCTGTAGGAGGTTGAACATACAGTAAATAGTTTCATTTGCTTAGAAAACATTTATATA

210/375

ATTGTTATTATAAAATCTAATAGATTATTAGAAATATCACAAATAATCAAGCAAGCATCAGACTAAATAAAATGATTA
TTTAATATTTTGCTTCATATGATAAAGAAAACTTAAATTTGATTTTCTATTGAAAAATATCAACAGAGGCTGGGCACG
ATGGCTCATGCCTGTTATCCCAGAACTTTGGGAGGCTGAGGCAAGCGGATCACCTGAWGTCAGGAGTTTGAGACCAGCC
TGGCCAACACAGTGACACCCCATCTCTACTGAAAAAATAACAAAATTTAGCCAGGTGTGGTGGCAGGCACCTGTAA
TCCCAGCTACTCTGGAGGCTGAGGCAGGAGAGTTGCATGAACCCAGGAGGYAGAGGTCGCAGTGAGGCAAGATCACGCC
AATGTACTCCAGCCTTGGAGACAGAGTGAGACTCCATCTCAAAGGAAAAAACAAGAAAAATATCAGCAGAAATA
AGTGAGTTGAGTAATTTCTAAATCTTATTTCTATGTAAGTGGTTAAGAAATAATTAACTTTTGTTCTAGAAGTATTA
GGAGACAAATTGCAAAATTTAATGTGAAGCCTTGGCTCACAAATAAATACTTTCTTTAACTTAGGATATATTTAAAGTG
GAATAATATTTTCCAACCTTAAATGTAAACCATTTATTTTTTTCTTTAATGTGTTTTGTGTATACATCTCCTTCTTTGTCA
AAGGTTTGAGTAGAATTAGAAATAGCTGCAATTTACAAAACCTCTATTTTGAAAGGAAGAAATTAATAATAAATAGCAG
AAGTAAAAGTTATCTTTCTGGAATCTAGGACTCTCACCACCTCTCATCTTCAATATTTACCCCATTTGTTTACATATGG
AATATTATAAAATTTAAATATAAGAGAACGGATATGTTATTATTCAAATATTTTCAATTGAGGGTGGTTTGCCAGTTT
CTTAGAAGCAATTTAAAGGAGAGGATAAGGTGTTTTCTTAAATAGTGCTTTCTTTCTGCTGAATTTATGTAACCTTTT
TTAAGAATGGCAATCTAAGTGTACAAATGATGTTTTAATCTCATGAGATTTCAATTTAAACCTTGCTTTAGAGTAACT
TTATGAGTAATAAGATTATACCTGTGGGAACTGAACTAAAAGGATTCAAATGGTTTTGACAAACAACAGATATTCAG
GGTCAGTGCAAATAAGGTTACAGATAATCACTCCATCTGCTCCATTGTGTCAGCAAAAATGAGGCCAGGTGTTGCAGTAT
ACCTTGTCCTTTCTCCTGAATTTGTGACCATTGACAAATAAGATTTTCAAAGAGAAGTCTGAATTCCTTAGGGTTAGCC
TGAGCTCTTGTAAGAGTTTCTTTCCAGCCAAAGTATTTCTTGTTTTCTGTCAATTCATGGGTTAGACCATTCCATC
CATTAGAAGAAAGTAGAGGAAATGGCTCAACCTTGCCAGAGTACAGCTGGTTGGAACCTCTGACAACGGAACTGTGGCC
CAGGGTAAAGAGCAAGAGGCTGGGGGAAGCACGTAATGCTTCTTAAAGCCTTTGATCTAAAATGACAGACTGTCTCTC
CACTCACATTCCATTAGCCCAAGCAAGTTTTGTGGCTAACCAGACAATGGGTCTCAGCAATATATCCCCCTCCCAGAA
CGCCTGAACATTCAAGTGGCAAAGAGTGAATTTGTTGAGAACATAATATAGTCTATAATAGCATATAATGTTTCATAAA
ATTAGCACCCAGGCAAACAGGACAGAATGCCATCCCCAGCCACAGCTTTATCCTGGCCTACAACGCTCATTATACT
TTCTTTCTGTGTGAAATGAACCTACACTTAGTTTATTTTAACTGATTTTTACAAACCATAAAGAATGCAAGAGATGC
AGTGGGCCAGGAAGAAGTGAGAATGTTGCCCTATGTGTGATTTTTCTAGAATCTGTCTAAGTTCTGCTTTATTCCTGG
ATATCTTGATATGGAAAATTAATAGGATTGCATGGTAACCTCTCTATACACAAGTTTATTTACCTAATTTAGCTCAGGA
GTATGACTCAATTACTAGCAACCTAAACATGCAATAATGAAGGAATCTCCATGTTGCTTATGCAAACATCTAGAGTCA
TATGTCACCTTTGTAAGTAGACAAAATGTAGGGCATGTGGGCTGGACATGTCAACATGCTGCTGACTTTATCTGTCTATTA
ATTTTTGTTGTGTAATTAGCATCCTAATGACACACCCCCACTGTATTCTGTGCCCCTGTCTCGCCCCCTTAACCTG
GAGCAGGTAATGGAGTTTTTAAACATCATTGATAATTTGCCCTCTTCAGAAAGTAATACTAAGGAAAAGCTATTTAAA
GTGAGCAGAATTCCTTTTATCTGTTGATTTAGAAATATTATTTATATTGCCAGAAATTTAAATGTTCAACATGTTTAT
AGTTATTTAAACCTTTTGTAAAAGTAAAGTATGTTAAATCTTCAGGAGTATCACTGGAGGAGCTAGATGACAAAATATATA
TATATATATATATATATATAATATTATCATGAAAATGCAGTGCTGGCAAACCTGCTCCTGGGATTATAAATATATCAGTA
AAACCACCCCTTTCTCCTGTATCCTTTAGCATTAGCCATAAAATAGACTGGCCAGTAGGGGTTACTCTTGGCATTATGA
TCTAAGAGTGGTAGATTAGAGTTTGAAGACATAATGAGTGGTATTTTTTAAAAATAGCTATTATCGTTGTGAATTTAGGT
GCAATATTCAGAATTCAGAATTGGTGATAACTTGCTTTGAGCACTGTTTCAGCAGCTTTTATCCTATTCATATGACTGT
CAGACATATTCAGGAACCTATTTTACTTAGCCTTGTTGATTGTCCCTCATTAAATAAAATCCACAGGTCAAATTTGTAA
AGTAGCCTTTTAGTTCAATTTGGCATCTTTTTTCTGCGGTGATATTTCTAGTCCCAGGGGTTTGAATTCAGACATCC
TTGAAAACAAAGCCTTATATGAATGTAGTCAGAACTAACTCTTTAAAGGCAAAAGCACAAACCACATTCAGTTACCCTA
AAGTAAGTGTAGTCAGGTGGCTCTTCAATTTTAGAAAATAAATTACTTTCAAAAAGAGAAATAGAAAAGGGAGGAAA
AAAATAATGAAGCCTCATGGACATTTGTTTTGAGAGAGAAAAATAAATAAAGGAAGTGGTTTTAAATATTGGTTTTT
ATAAAAACAAACCTTAGAAAAGCTTTTTGTCTGAAGCCCAATGGTTACAAATGAGCTCTGTTACTTAAACATGGGGCA
GAAAGAGTTCATTAGAATAAAATACTATTACCTTCAGAAGAAATATGTAATACCAAGGGATGAAATGCAAAAGTTACTA
ATTCAATATTTATTTATTTATTTATTTATTTTGGCGACAGAGTGAGACTCTGTTGCCCCAGGCTGGAGTGCAGTGC
TATTATCTTGACTCAATGCAGCCAGCCTCTGCGCTTCTGGGTCAAGTGATTCTTGTACCTTAGCCTCGTGAGTAGCTGA
GTCTACAGGTGTATGCCACCACACTTGACTAATTTTGCATTTTTCAGTAGAGATGGGGCCTCGCCATGTTGCCAGGTG
AGTCTCAAACCTCTGAGTTCAAGCAATCCACCCATCTCGGCCCTCCCCAAGTGGTAAGATTGCAGGCATGAGCTACCATG
CCCGGCCCTACTTCAATATTTATTTTAAATAAATCAAGTTTGTATGAGAGAGTTGTGAGAGAATAGGAATCTTCTAAC
TGCTGGTATCTTGATGCATTCAGAGCTCAAGGATGTGTGGTGTGGTTTCAGACCATTTCTGTGCACACTGTAGCAGAAGGA
TTGCCCTTTGATGGCTGGGCAAGGGAACATTATGATAGATGAGTTATCAAATATTGCTAAAATCTTTTAGGCAGTTTG
ATATAGATGTTACTGTAGCTGGACACTGTGAGAGAAAGGAGATAGCTGTAACAGAGTACCAAATGAAAAACATTTTTGA
ATAGACTGTCCTTAAGACTTCTTACCTACGAAGACTCCTAATCTCTTCTTATGACATAATTATCGGAAAGGCCTGGAGG
CCACACCTTGAGAAGAAAAGCACTTATCAGTTGTGATTTTCAATTTCTTTCAGTTTTTCTCCACTCAGCTAGCTTACAG
AGGAAACCAAAATGCAGTTGGTTGTTTTCTTTACTAACACTCAGTTCTTAAGTGCCTTAGCTTTAGAAGTTTTTCTGC
CTGTTTACTTCCACTTCTTGTGTGACATAACAATATTTTAGGGTTTTATTTTTCTTTTCAAATCTTCTGGTCTTTGG
AAAGAAAATTAAGACACTATTTACTCTATGTTTGCTGATGCAGAACAGTAAGTTTGTTCACCCACCAAGTGATTCAT
TCTAAGCAAATCTCCCATTTAGGCATTTGTTGMAAATCTGCAAAAGTTGCTTTTATTTACTGATTCAACATATCCCTTC
CCAGTATAAGGATCTCCTTTGACGGTGAAAATCTCCTTGATTGCATAGGTTTTTCAATTGTACAGAGAAGGCTTGACCTT
AAAAATTTAAGTYGCATTAAAATTTCTTTTATGTTTTAGAGAGACAGAGGCACTCTGTTGCCAGACTGGAGTGCAGTG
GTGCAGTCATAGCTCACCGTACCCTCAAACCCCTGGGATCAAGTGATTCTCCACCTCAGCCTCCTAAAGCATTGGCAT

211/375

TACAGATGTGAGCCACCTGCTTGGCTGAAACTTTTCTTGAAACACACACACACACACGAACTCAGACACACTTTT
TTATTTATAAAGATCTCAACCAACTTTTAAACCATGCAATAAAGGAATATCTTTGGCATTGGCAATGTATATTTGTTG
ACTGCTGGAGTCCTTTGGGCAACATCAAAACACCCAATTGCTCATTTTAAATCTGGCTTTCCACGCCTGTAAATCCAGC
ACTTTGGGAGGCCGAGGCGAGGCGGATCACCAGGTCAGGAGATCGAGACCATCTGGCTGACACGGTGAAACCCCATCTC
TACTAAAAATACAAAAAATTAGCTGGGCGCAGTGGCGGGCGCTGCAGTCCAGCTACTCCAGAGGCTGAGGCAGGAGA
ATGGCGTGAACCCAGAAGGCAGAGCTTGCAGTGAGCCGACATCGTGCCACTGCACTCCAGCTGGGGTGACAGAGCGAGA
CTCCGTCTCAAAAAAATAAATCTGGCTCTCCATTTTGGGTTCTTAGGTAGATGGAATAGAGTTTCCAGACTTGAGG
GTTTTAATTCAGCAACCCAGGATCAACACTTTCTAGGTGTGAGACTTTAGTAAATAATATACTCAGAGATTCATGGTTT
TTTTTAATCTATAAGTTGCAGAAAATAATATCACTATCATGCTTTTTTAAAGGATTAAATAAGATATATTTAAAAATT
TGTTATCCTTATACCTGGCATAGAGTAAGCGAACAGTAAATGGTATATTTGTAATTATTTCTTTTTTACGTTGCTTTCTA
CTTAATATGCGTTTATTAAGCTTACCTTAAGTATAATTTAGCAAAGGATTATTTTCAGTTTTCCCTTAAACCAGTTTAT
AAGTTTACATAGGGAGGTTAAAGCCAACAGGAATTTTATGTAATAAGGAAATTCAAATATTTTCAGTATCTGTGATAAG
AGTTGTGTTAATTTGCAGAGGAATAACACAAAACATTGATTAAATTTGGATTGCTAAATGTTAAACAGTGTGTTGTACAA
TAAAGTGTGATTGAGAAAAGCCTTATTATAACATGCGGAATGTATTAGCACTCTTTGGAGACTTACTATCTTTTAAT
TTATTTTATTAAGCTGCTGTTGTGAGCTAACTAATAACATAAGTGTGAACTAGTTTGAAGAAGAAATGCGATTTTATTG
AATAATATTTCTGCAAGAATTAAATATCAATAGGTTAGCAATATCTCCTCATTGAGTTAAAGTATATAGATTGTATACAT
GTTCTATGTATATACTATATAAATGTTTAGATAGTATATGAAATGGCATAAATTACTATAAGCTTACAGGGAATAT
GCAGAGTTGCTGTTATTTTGAAGATAAATGATGACATTTATTTTATCTAAAACTTTAACTCTGTTTCAGTGATTTAG
ATTCATTTGAGCTCTAATGATTGAGAGTAAGGCACAGGCATAGCCTTAATTTATTGGTGATGAAAAAATCTACTTA
TTGGCAAGATGGGGGAAAAATCACAAGCCTTGTATGGAATTTGTATGATTCTGCAGAGTTGCAATGGTGTTAACAATTG
TGACAAGTTGACACTTTCTGAGACAATCTTCAATTTTAGCAATTTAAAAAGCAAGAAATTATTATTTATAACAGTATTCA
TAACATAGCAAAATGGTCATATTCCTTATAGAGACAGCACTTCCGAGTAGTCTTTATTTTGTGTTTTCAAATTTGTCCTTT
CAATATCTCAAAAATATCTTGTGTTGCAATTACATTTCCAAGTATATATTTGGTTGGGATGAAAATAGCTGTAATAGTAG
TAGTAGCTACCATTTATTGAATCTTGCCACGTGCCTCATATTTTATGTGGTGATTGATCTTAGGCCCTTAGGACAAC
TGTAAGAGGCAGGTATTGTAGAAGACAATGTTTTCTGAGAGACTGAAATGACAAATTAGAAAAAAGTTAAAGACTTCT
TGGAAATGCTATCTCTATAAGGAATATGACCAATTTGCTATGTTAATACTGTTATGAATAATAATTATTTGCTATTGTAA
TTGCTAAAACCTGAAGAGTGTCTCAGAAAGTATAATTTATTTGTCACAATTGCAACTCTGCAGAATCACCCAATTCATA
CAAGACTTGTGATTTTTTCCCTAACCTTGCCAAATAAGTATTATTACCATAAATAATATGCTGACGTTTCAAAGTTTAAAG
AAACTTCCTACAGTTCTCACACGTAGTGGTGACAATATGGCTAAGGGGTTAGGAATGCCACATCCTCCTATGCTGCAT
CCTGCCTGTGGTTTAGATTTGAGATAGGGACCCCTACTTTCTTTCCCTAAGAGCAGATCTGTGTGCTATTGGCTATAACT
GCTTCTGTGTCAGCCACATGACACGTGGACTTAACAGATGGTTTCTAATAAGATTGAAAGCATATCTTGACTCCACTTA
CCTGGCCAGCACTGGAGAAAGGAAGATTAAAGAGAGATTGAGATGAGTGCTTGTGCATAACTTCCCTCCCTAGAAA
ACTTGGTCCCAATACGTTGTAATCTGGTGGTGCAAACTCACAACCTTTTCTCCCTTCTGTGAGTGTGTATATATGTGAGT
TTATTGTATGTGTGTGTAAGGTGTGAATGTGTATGTGAAGTCTGTGTGATGTGTGTATATTTGTAATGTCTGTGCAT
GAGTTTTTTTGTGACTGAAGTGTGTGTGAGGTGTCTGTATGTGGGATGTGTGTGTCTGTGAGGTGATTGTGTATGAGGA
ATGTACATCTGTGTCTGTGTATATAGAAAACGTGTGTGTGTTGTTGATGCACCTGCTGTGTCTGCATATGCATGAATTGA
GTATGTGACTTGTGAGTATTGTGTGTGTAGGAGGAGGGGGGAAGTAAAAAGGCAAGGTGACAGTAGAGACTGGACAAATGA
ACATAGCCGGGCATTTTCCCTTAACTCCTAGAACAGACATAACTTGAAGTGATCTAGACTTGAACCTTTGGAGTATGAA
GTTCCAGCCAGCTGTGTAACATCTATTTAATATTTTGAAGCGCTTAGCCTGCTTAAATCTTGATTTTATCATTTCTAT
TAGAGAAGTTTTAACTTAAATGCTCTAAGGTGGGGGTGTCCAAGGGAGAAAATACAGTCATGGGTTCTTAGTTTCTGTT
TCTGGTTGGGCCAGAAAAGCTCCTTCTCATCCCTCTTTTCCACTTATCAACAGAGACAGAAGCTAAAAACCATGGCTT
CTGGCTGCTAAAGCCTAAAATAAAACAAAACAGAACAACTCATCAACAATAACAGCAAAATAAAGCAGGTTGGAAATG
ACTGCTCTAAGGGTGAAGTGAATATGTTTCAGGTTGGAGTTACTGATAAGTTGTAAACAATTACAAGGATGTAAATATT
GCATATTTTTTATTAGTGGCATTACTTTTCCAACATTACATTTTATATTGAAGTTCCAGAACAACAAAAAACAATAAG
GTATTGCAGTGAGGAACCTTATCAGTAAGTGCTTCTACCTTCAAGGAATTAAGTTAATTTTTATTGGCAATATTTGGAAC
ATTGTATCAAGAAGAAAGACTAGCTAACGAATCTCTTTTGCACATCAAGCTCTTACAGTGTTAATTCATTAAACAACATA
AGACAATTTTAAAGTAGGAGCTTTGGTCTAAGATGTGTGGCCGCAAACTGAACCAATACTGACAGAATTTGGCATTAAAT
TTTTTTTTCAGAGAATTTTTTTTTTAAATATATGGCAATGGTTGAAAAAACAATAGAAATATTGTAGTTTCTCAAATTTGTT
AAACACAGAGTTATATGATCCAGCAATCTACTTCTAGGTATATACCCAAAAGAATTGAAAATACATAGACAAATGTTT
ACAGCAACATTATTCTTAATAGCCAAAAGTGGAACAATCAAAATAGCCATCAGCTGATGGATAAAACAAATGTGGTAT
ATTATGCTAAATGAAAGAAGCCGGAATGACATAATTTTCATGATTCCATTTAAGTGAAATGTCCACTATAGACAAGTCTAT
AGTGGATTAAATGAGTGGCTAGGGTTGGAGGGGGTATGGGGAATTGAAGATTGAGGGTCAAAGGGTTTGGGGGGTGTACT
GAAAATATTCTAAATTTGTGTTAATGGAGGCACAACCTCTGTGAATGCACTAATGTCACTGAATTGTACATTTTAAACAGG
CAGATTGTGTGGTATTTTCAGTTGCATCTCTATAAAGGTGTTAAACTAAATATAGAACAATTTTCTAAGTAGTGGCCC
CTCCTCATTTATTGGACCAATAGTTTGGGAGGAACCAAGTCATGACCTTCTGATACAAATCAACACCTACAGATAGGAT
GGGAGGCAATTGTGCTAACAAAGTACCTCAAACCAAAAGTCTGTGAGTAACTGATGCTTTTGTCAAGGATGAATGAC
CAGGGGCAGGTAATAGGTGAGCAACTCTCAACTCTTTTGTATATGGTACTATAGTCTGGAAGTACTGAAAAA
CGCTAGATGATAAAGTCATTGTTATTTTATTCTTCCCTCTCCCTTCTCCCTTCTCCCTTCTCCCTTCTCCCTTCTCCCT
ATTTTATTTATTTATTTGAGACTTGGTCTGGCTCTGTTGCCCAAGCTGAGTTCAGTAGCAGTATCTCAGCTCACTGCAA

212/375

CCTCCGCCCTCATGGGCTTAAAGCCATTCTCACACCTCAGCCCTCCAGAGTAGCTGGGAATACAAGTGCATGGCACCATGCC
TGGCTAATTTTTTACATAATTTTGTAGAGACGGTGTTCACCAGGTTGTGCAGGCTGGGCTTGAACCTCCTGGGCTTAAAGG
ATCTGCAGGCCCTCACCTCCCAAAGTGC'TAGGATTATAGGGGTGAGCCACCACACCTGGCCTCCCCTCCCTTTTTCCCTC
TCCCCTCCCACCCCTTCTCCTCTCCCCTTCTCTCTCTCCCTTCTTCTCTTTCCCCCTTTTCCCTCTTCCCTTCTTCCCTC
CTSTCTTTCCCTTTTCCACTCTTTTCTCCTTCCCCACTCATAAATAGATATTATAATGAATTAATTTAGAATTATAGTTA
AGCATACATTTGAAGTAATTGTTCCAATTTTATAATTTTGAAGTATTTTCTGAGAATAAACTGGGCAAATGCAGAAATTG
GGACAAATCCTATGTGCAATAATTGCTAATAGGAAGTGTCTGAAGTATGAATTCCTCCTCCTTTCTTGTGTGACTTG
TCACTGAATCTCCAGTCTTACAGAGTACTATGTCTGTGCTTATTGTTTTATTTATACCACACCCCACTTCTACGTATAAAC
ATCACTTTTACTACGGTGGATTCAAATGATCTCTTAGGAATTTAGTTACATTACAGTCTCACATAAAATTACTGCCCTT
AAAAACATTTGTTTGTCTGGGCAGGGAGTGGCGAAACCCCATCTCTACTAAAAATACAAAAATTAGCCAGGCGTGGTGGC
GGGCGCCTGTAGTCCCAGCTACTCTGGAGGCTAAGGCATAATTGCTTTAACCTGGGAGGTGCAGCTTGCAGTGAGCAGA
GATTGTGCCACTGCACTCCAGCCTTGGCAACAGAGTGAACCTCTGTCTAAAAAATAAAAAAATTTTTTTTTTTTGGCT
AACATTATTTGAAGAATAGTCAGTTTCAATGATGATCTATGTAGACCTAACCAATAGTTGTTATTTTACAAGTTTTCAGTTT
TGAAATGTTGGATGATATCTTTTCAAGTTTAAAAAATAGTATTTTCTATAAAGTGTCTTTTTTTTTGGATGGAAATGTTTCTG
GAATGTGACACTTAAATTTTAACTACTATTATAATTAATCAATGGATTTGTTTTGTCATAACCAACAGTTGGATAAGTT
CAGTTTATGTGTCTGTGCAATACTAAGATATTTTACTTGGCATGGAGAGAATCACTGGCTTACTAAATAAAGAATTTCAGC
ATTTTGTGTGTCAATCCTATGTTAATTGCATTTATATTTCTGACAGTTTCTTGTATGGAATTAATAAAGAAATTCATGC
AATAAGATCTGAATTGAGTGTGAAATGAGTGTCTCTGAGCTCCAATTAGTGAAGTATTGAGATTTGAAGAATGGTT
GAGGAGACAAGGTTTTATAATTGCCCTTCTGGGAAAGAATGAGTAAACAATAAAGTCTTGAGATCTCTCAAAACAAAT
ATACAGTCATAAGGAAAGTTTAAAGCCACAGTGAAATGCACACCTCTTAATTATGTTAACATTGATATCTATTTTAAA
TTGATATCAATATTAGCTGTGAAAGTTTCGTATATTTTGCAGGGACAAATTCTCTTAGTGTACTCCAAATGCTTATTGT
TACACATCCTGAGCACACAACGCAACATATTGGGCAAGCAAGAATCTAGGCTGATATGTGTGAATGCTTATGTGGCA
TTCTATCAAAGGAGATAGATGTACATAAGGGGAATTATGGAGAAGTGAAATTTGTCTAAGGTTTCAATTTTTTTCAGTAGC
TTAATTTTAAATAGTAAACTCTTTTAAAGGAATGAATGGCCACAGGCAGAGACTAATGGTGTACTTTTCAGTGTCTCAGTG
AGTGCTTTCACAGATTAGGTTTCCAAGAGAAGAAGATTGCCTCTGAGGAAGAAGAGATGGGCTAGCAAGGCATATATG
AGACCGTTCTTGGGACCAACACCTATGGAGGGGAGGGAAGAAGCAGAATTATGGGACAGATAGAAGAAGTTGGTCTG
CAATGCAGTCTTGAGGAAGGCCTCAGCAGAGCCAATAGACAGTTCGAAGCTGGCATGCCCTTGAGAGTTGTCTTAAAT
TCGGGTGAGAGGGTTAGGCCTTTATATCTTGTCTGATCTGTAGATGCTGGAACAAATGGTGTCTTTAGCTAAG
GCAATTTACAGAGGGCTGACAGCTGAGACCACTTGTAGAATCTAGGAAAATGAGTCTTTTCAATCTTGAAGGGGAATCTT
CATCATCACTCACTCAAAATGGTGCTATATTTTGGAAACCAGCAGACACTGAGAAATGCCAGGTGGATAGAATCCTTCTCTT
CTTTTATCTATCTTTTTTTTCTTTCTTTCTGTCTCCTAATCTAGTGCTTCTCCAAAATACTTTTAAAGAATTAGAATTA
GGCCATTAGTTATTATAAGGAAGGAAGGGAAATAATCATTTTCATAAACTCAGCAATCTTTTAAATGTCAAGATATGG
ATTATTATTACACTCAACAATTATAATTATTAATATTTTCCACGGAAAGTTTCATATATTGAATGACCCAAGTACTCC
ATGTGACCTTCCCTGTCTATGTAAGCCTAGCATTCTGTCTAGCCAAATAAAATTTTGGAAAGGAAGGTGAGATAAAATAT
TTTTTCACTCGGTGTTAAAGAAAAGAAAAAATAAAGAACATTTTATTGAGCATGCACTAAATATGACATAAAAGATCTTT
GTTTTCTGTATTAGAGTTGAGAAAGAATGAAACAGTCTATTGATTTGAAAAGCTTTGTCTCATTTAGCAATTATTAT
TATT
CAGTGGCGCGATCTCGGCTCACTGCAAGCTCCGCCCTCTGGGTTACGCCATTCTCTGCTCAGCTCCCGAGTAGCT
GGGACTACAGGCTCCTGCCACCACGCCAGGCTAATTTTTTTTGTATTTTATAGTAGAGTGGGTTTCACTATTGTGGCCA
GGATGGTCTCGATCTCCTGACCTCGTGATCCGCCACCTCGGCCCTCCCAAGTGTGAGATTACAGCGCTGAGCCACCG
CGCCCGGCCAACAATTATTTTTATAAAATAAAAGTTTATTAATGAATTTATACAAATAGCACTTTATAAAAACTACAAC
ACATTCAATTTGGGCTGGGCTGTTGCTAGTCAATTTTATTAATGAATTTATACAAATAGCACTTTATAAAAACTACAAC
ACCACAAAACATCAAAATTATGGGAGGAAGTGAGTGCATAGATATATGAATCAACATTTCAAAATGGTAAATAGAATGACC
TTACTTTATTAAGTAGTGATCTTTTATCAAGCTGTCTACAATAAAATCGACCATAACATTAACATGGTAGATGTTACTAA
CCAGAAATCTTAGGTATTTAAAGTTATGTTTACTTATTTTTTTTTTAATAAGACTTGGAAAGTGTCACTTAAATCACACTTA
AGAATGGATATTGGCTAAAGGCTGTGAGTCTTTTAAAGATTCCTGTGAATTTTTTTTTTTCAGATTGTTCTCAGTCAATTCA
GGATACTTGTCTATTGCTGGCTATACAGCAGAGTGAGAGTTAGCCCTTGAGACACACAAAGATAACTCAAGGCACTGA
TTTTCTGCATCTTCAGCCTCCTCATTTTCAATTAATACTATTAATAAATTAATTCCTGTAGAGATAATTTGCATCAATCAACAGA
ATAAGAAGATTAGAAGAGCTTCTGAGGCTTTTCTATGACTAAAAGAGCAATTCCTTTTATTGACTACCATAAAACATTAGA
TTTACTAAAAGGAAAAGGTGTTTTAAATTGAACCACCCCTCTAATTTATTCATCTTAGTTCTGAAAACATGTAGGTAAG
AGTTAATCATGTTACTGAATCTAATTTAAAAAGTGAGAGGGAAAGTACTGAATATTTTTCTCTTTTGAATTTACATGTT
GTTTGCAATATTAGCCTGCCTGTATTTTTTTCATGTAAACCTTTTGTACATTGAAAACAAATCAAAATAAAGAAGCAGTTTG
TTTTTCAGGCTCAGACCTTAAAGAACTGATGGTCTTTTCTTTTACTTCTACACAAAAGCTAAGCAGTTCTGAAGAAACAC
TACAGTGACATTGGGTCATTGCTAAAAAATAAAGGTTTGAATGATTATTTTATGTAGAATGGAAGTGTGTCTTTTTCTTC
ATTATGCAACAAACATTTCTGTGATGATACCAAGCAACGGTGACAGGTAAGCATGCCATCTAGATCAGTGTATATATA
ACTCCCAAGCTTCAGTGAAGGCTCATTTTTTGTATTACAAACTGCCTCTCTGGGACCTCATGAAGGTACTATTCTGT
TTCGGGAATAGGTCTATCCATCCTTGTCTTTTTTGTCTTCTGTCTGATTCTACAATCTCCCTTTGGCCATTACCATCT
CAAAATCTCTGCTTCCCAAGGTAATCCGTCTAGCTTTTCTAATCTTCTGGCTTCCATTACTCATTTCAATTCCTTCTTC
TGGCTCCCTGTTGCTTTTCTTAACCAATTTCAATTACTTATCCTTATCTTGAAGGCCATTACCACTCTGCCCTGTGAC

213/375

GTGTTTTTCTTATCACCCAAGATTCTCCCCGGCTCACACTTCTGCATGCAAGCACGTTCCCAAAGTATGAAAATGCT
TTGGATTTTATATCATGCTGTTGCCTTGAAGAGTTTTATTCTCTTCTCATATCTTCTCAGAGAAGAAAGTAATTTGGCT
GTGGTTCAAATTCACCAAGGCAGTAAATCTTGTTGTTTGTACACAACTTCTTTCTAATGACCTCTCCCTTTCTTCA
CCTCACATTGGGCATTCACTCATAACTATTTAAGGGCCTTCTCTTAGGCGGCTGCCCTGTTTTTCAGGTTGTGCCCTATG
TGGTCACAAGTGGCTATTCTTAATAAATCATAGAATCGTAGAATTTAAGTACTGACAGGGGATTCCTATATATAAGAAT
CCAACCTCTACTCTGCAGAAATCCATCTCAGAACATTCTCAATGCTTAAAAATTGCCCTTTTCGGGAGAGAACATCAACT
CGTAAGACAAGCTCTTTCTTGTGCTAGGACTCATTTTAGAAAAATATTCTTTGTAATGAATGTTTCCCTGCCAC
TTCTCCCTTTGGTATGAGGCATGTTGCCAGAAAGATACAAAAATAATTCTAATAATCTTTCTTAGCCTTGATAATGCAA
GAGAATACAGCAATAATTTCTCCATTAAACCTTATTTTTTTTTTTTTTTTGGAGTTAGATGCCATAAATTACTTCAAGGA
TTCTTCTTGTGGAAGCATTTTTGAGAATTTTCTTGTCTTCTGCACCTCTGATTGTTGTAACCTTGACCAGCAGACTTCAC
AAGAAGCTTGCTGTCAGTGTAGTCCAAACACAACCTATCAGTTAGTGTGTTTAGTCATTAATATTAAAGAGTGTTTTC
ATAACCTTTAAATTAATAATTAGTCATCTTTATCTTTAATGACTACAGAAGCTCACATTCATAGTATTTTGGTAACATA
AGGTATCCATAGGCTCAAAAACTCTTCAAAATTATTGTGTAATGAAAATGTTAACCATATTTAAGAGAGTGACTTGGAA
AAAGGCCTTGTTTTTCAATCTCATATTTTGAAGAATATTGAGATGTCACCTGAATAGTATTTTGAATTTTGAATTG
CTCACACATGAGCACTTGGGGAAATTGGTCAGTGAATATATCTCCTGAGCACTTTGTTCTTGAATTTATCAAATCCTTC
TTGGAATTTCTTTTCTCTCTCTCGTGATGTGTTGGGTGGGACTGGGACATTACCAACACAATTAGAATTCATTTCTTT
TTCTTCTTAGTGAAATTTATTTTCTAAAAGGTTTGTGTGTTTCACTCTATTAGCAGTTCTGGAATCATCCAAGAGTCTA
AGTAGATGTAGCAGAGCTCTTATGGAACTCTGGATATATACATAATCACACAGAGAATTTGTATTTAATTTTAGAGTT
ACATGTACCACTGGAATCACATTCATATTTCTATTACAGTGTAGTGATTCTGGGTTAAGAATCACTGATTTAGTTCTAC
CTCATTTTACATATACCTTTTCTGCAAGATATATAAAAAATAAATCATATGAATAAGTTATGTGTTTAAATAGTTCCA
TTCAGTCATCTCATAAGACAAAATTACTTTCTAAGTTAATTTTAAATTCAGATCTTTATAGAATATTGAGGTTTTAAATG
TGAACACATATATATAATTTTATGATACAACCTTTTCTTCTGAATACTTAAAGTGTTTTTACAGTTGGAAGTATCAAAA
ACTTTGTTCTCTGTAAACCTTCAGCTTCCAWCCTTCTTCAGTCTTATCTGCAGTTATCTCCTGCACATGTAAATGATGT
GGTAGAAGATACGGTTTAAAGATGAATTTTAGTTATTTAAAGTGTTGTCATAACCTGAACATTTTACAGATATATTTAAAC
AGGTATAGGTATATTTAAATCACTATTTTAAATTAATAAAAAAAAAAACTTTGAAAAATCCCTAATTTCAAAAAATATAT
TAAATGTACATATATGAATAATATATAGAGAAAGATAGGAAATATTACCATGAATTATACAGACCTCAGTTTATCTAA
ATTTACAGTTTTTAAATAATAATCTTATCTTATTATCTGAAGATGTCAATGATGATATGTTTTCATTTTATATTTGGC
TTTAGTTTTACCAATATTAACATATAAATTATTAACAATTTGTACACCAGCTTTGTGGTCTCTCCTTTGTGATGTGTGAT
TTGTGTAATTTGATGAACCTTGATGAAAGCTTCCATTTCAACTTGAAGGCTGTGAATATGCCAGATTATGTGCATTTTGT
AGTAAGGATTATGGAGCTGAACAAGTATGACAGACTTGTAAATATGTTGTCTACAAAATTTTTTTTTGTTTTTGTGTTGA
GATAGAGTCTCTCTGTGTCACCCAGGCTGGAGTGCACTGGCGTGATCTCGGCTCACTGCAACCTCCACCTCCCGGGTTC
AAGCGATTCTCCTGCCTCAGCCTCTCGAGTAGCTGGGACTACAGGCTCGTGCCACCATGATCAGCTAATTTTTTGTAGT
TTTAGTAGAGACAGGTTTTACCATGTTAGCCAGGATGGTCTCGATCTCCTGACCTCATGATCCGCTGCCTTGGCCTC
CCAAAGTGCTGGAATTACAGGTGTGAGCTACCCGACCCGGCCTATTGTCTACAAATTTTATCACTTTTGGTAAGAAATG
CACAAAGCCTATCATGATGTCATTGCTAGTTTATATGTTTGTGAATTTTAAAGCCAAACAAGCGTTCAAACGTTTGCCA
CAAATCGAGGACCTAAAACCCAGTTTTATATATAAAGATATTTAAAAACATATTTCTGGAGAACTATGCATATACTACC
AACACTTACAAGGCAAAATTAATTAATAATGTTGTATAAGGAATATAATTTTTAAATTTTTTAGTGTAATCAAGAAAA
GATACATTGTTTTATCAATTGATTAATTTATTGGTCATAGGATTTGGCCTATTTATATTTCTGAGTATCCAACAGAATC
AGTCCCTTAAAAATGCTGAATATCACAATTTGCAGTTCCGCTAATACATTTTATATCCATTTTATTACTTAGTTGTAATAT
AAAGGAAGTTACCTCTTCATATCCCAGGGAACATGTTAGTTGACAAGGAGTGGGTCCAGGCTTTATACCAACTGATG
TCTTATACAACCTCGAGGAGTCCCTTTTAAAGAGAAATGGATACATCATTGGAATATGTATTGAATGTGGAGATTGAATAT
TTATTTAGGATGTAAAACATAATCACACCAGATTATAAAATTAATAAAGCTGACAAATCTCAAGGATAACAAAATTT
ATAAAATTAACCTTCATTTTCAGAAAATTAATTGCTTGATACATTTCTATGATTTTTTTTGGCTCTGTAGTTTTGGTTGCT
TATTCTCTGATTGCCCTCTTCATTTTACATGATTCTATTATGTTTTCTATGTTGAGAATAACAAGATAATGCAGTCTTTT
CTCTAGTATAATTGATTGTAATCTGTCAATTTTATACCAGTAGTTTAGAAAAGTTACATCAAGTTTCTCAATTTTGGG
GGTGATTTTCATATACATTTTAGGACTGTGACCAAACTTGGGAAATATCTCTATCAAATGTCTTTCAATTTTGGG
AAGATTTGGAAGAATTTTCAAAGAGCAGTTCTTGGCTTTATATGTTTTGAACATTGTGTCTCTTCACTCCACACAGAC
TTGTGGTGCCTGAAGCTCTGGGCAATTGATTTTGGAGTGATCTCTGGGCTTGCACTTTTATGTTTACCAGCACCATGGT
AATCAGGTGTGTTCTGTTGAAGCTACACCCAGACAGCCAGCAAGAACCTAAGGTACAGGGAAGAGACTGAGAACCACAA
GAATATAATCACACCAAACCTGAACTAAATGAATCTTTAACTCAGTTTCTAATTAGCCAGATCCCAAAATGGCCACAG
TCACCCAGTGCTAACTAACCCAAGGGAAGGTGTGATATAGGCAAAATCAGTACGTAGACATTGATCTTAAACTTCTG
CAGTTAAATGTCTCACTCATGCAAAATCTAAAAGCAAAGGAGCATGCCATCCCAACCCCTCGAGCCTTTTCCAGTGCC
TTAGGAAGGAGCTTGTGCAAGTGAGGGGCCCTGAAGCTTCAACCTTCTAGCCTCACGGTAAATCCACCTCTGTGGTAG
ACAGAAACATTTCTAGACCACAGGAAATCTGTTTGCCTAAGGAAACACAGAAGCTGTCTTACAGTTAAACAGAAATAG
TTCTATTTTTTTTCTAGAGTTCAACCATTTTCTAAGGGGTATTTCTTAGAAGTTTCAATTTTATGAAGTCTCTCCACA
AGTTCTTTTTTGATAGCCAATAATTCAAATGTCTATGCTACTTCTTTAAATCACTCCAGTCATTGAATAGCATAATCTTTT
CAGGGGGCAAACAGCTGGGCTCCAGTAGGCTTTAAATGTTTCAATTTTGTGTTTCAATTTTGTGACTTGCATAGGAAGT
AATCCCTTTCTATGTGAAATATTTCCCTCGATTAAATTTTAAAGAACCAATGGCATGTCTGATAATGGGATGAAAGCCCA
ATTCACTGAACAGAAATGTGCTATTTGTAACCTGGATTATCTTTAGGTTTTTCGGCATAGTCTCGAGAAGCTGAGAAT
CTGTCAATTTTATTGATTAAATAACAGTACAGATACACAGTTTACATTAGAAATAAAAAATGTTGTAAGCTCAAATAGG

214/375

CAGGGTATTTTACCTGAAAGCCTGAAATAAATGTGATGAGAACCCTATGAACCTAAGTTCCAGTGTAACAAGTGGGTAA
ATTCTCATTATAGAACTTCCAGTGAGCAATGCAGCATGACTGTGGGACCATAATTCAGGAACAATCTGCAGAGCAAAA
TATAGAGGCACTAATTTTGTATATTTGCAGCCACATACTGTAATACCAGATTTGCTCCTGTTGTTCTGGCCAAAGAT
GAGTCAGGTACCTCTGATATAACCATTCCTAAAAGACAACAATGGATTGAGAATGTGAGACTGAGAGAAATCCTAGAAG
TCTGACCTTCAGATCAGTTTAACTGTAGATCAATAATCCATTACTCAGACCAACACAGTACCAAAAAATCTCTTCAGCT
GGCTGCCAAGGTACTATTTTATCTTAAATAAGCTGGTTGAGAGCAGTCAATATAGATACATTTTTTCCACTGACAATTT
GCTGATTGAGAGAACATGCAACATCCAGCCACGAAATAGATAAAGCTCAGGCCTGCCCTGTAGAATATGGTCACCTGGC
TTTCCTGTTCTCCTACAAATGTCTACTGGAAGAATAGCCCTTAATCCCTTAATGTTTATCTAAACCAAGGCTTGTCT
AAATTCTCTAGACTCTATCTCATGCATTATTACATCTCTCTTGGCAGACCCAGGTCTATGGCCTTATGTATTATTAGTGAA
ACCTTCTACAAATGTTGGTATTATTGATATTGAGGGAGGGGAGCCAGGTCTATGGCCTTATGTATTATTAGTGAA
TTACAATTTCTTAGAGTAATAGGCCAATGATTAAAGTCACATGTTAGGAAAACCTTAAATCCACTAGGGAACCTTCCAA
TATTTTTCAAAGTAATTTACTACATTTGGATGCAAAATTATATAGGTGTTTTTGGTGGTATCCACTTGTCTTTCTGTGTC
AACCTGAAGAGATGTAATGTAATCGATGCTAATTGTACCGTGTCTTACACAAAGAGCTAATTTGAGTAATATCCTATC
CCATCAGTTCATTTTACCATACATTTTTTCTTTACAAAATTGTTTTTAAACTCCACTGGAAAAAATATATAATAA
ACTACATGTAAATTACACAATTTAGTAAATTTGATATAGGTATACACATCTGTGAGAAAATTACCAAAACTGAGATAG
TACACAAATATATATACCCCCAAAAGTTTCTCTGTGTCTTTGTCTATTCTTCTCCAGCTTTTTTCCAGAAATTTTAC
CTTCTCAGGCTGATCAACACTCAGCTGAAGACTCAAGAGGGGGCCTGTGCAGATGTCCCTGAGTTCCCTCTCTGGGCC
ACTGTCTCCTCTCTTTTTCAGCAAATCTAGTTACCTTGACCTCCCTGAATTTCCAGCTCCATCTCTCTCAACTTAGGGAG
ACTTTCAGGTCAGGCAGTGATCCCTCCTCTTATGCTGGGACCTGGAAGCTCTCCAGCATGTACACTGGGGCAACCATA
GGCGTCATCTCATTTGTATTCTATTTCTCTAATCACCATGCTAAGCTAAGCTGTTGCTTAAGGTCTGAAAACCTGTTGTTTC
ATTCTTTTTGTCCAGTTTTTCCATTCTTTTCATGAGCAAGCATAAACCTGACTCCTTTGGGCAAGAAGCAGAAGTCCCTA
TAGTGACTTTTATTTACTTTATTGTTATTGTCAGCATTGGAAGAAAAAATGTAGAGATTGACTATTTTATACTATTAA
GTAATTTTTTGTATATTGATTTTACCTAAACAAGAGTTTATTAGAAGTATTTTGTATACAGCTTATAACAAATAAT
GTACAAAATTAGAAAATCAGATGAACAAATTTTTTATAAGACTTCTCGTGGTTATAGAATGACTCTAACACCTTGTA
GTGTATTTTTTAGGATTTTGTCTTAGTGCATGTGTAGTCTGTTTTTATGCTGCTGATAGAAAGACATACCTGAGACTGG
GAAGAAAAGAGGTTTAAATTGGATTTACAGTTCCACATGGCCGGGAGGCCTCAGAATCATGGTGGGAGGTGAAAGACA
CTTCTTACATGGTGGCGGCAAGAAAAAATGAGGAAGATGCAAAAGTGGAAACCCCTGATAAAACCATCAGATCTTGTGA
GACTTATTCACCACCACGAGAATAGTATAGGGGAAACTGCCCATGATTCAAATTATCTCCACCGGGGTGTCCCCCAC
AACACATGGAAATTATGGGAGTATAAATTCAAGATGAGATTTGGGTGGGGACACAGAGTCAAACCGTATCAGTGTATATG
TTTAGAGGGACATAGAAAACATATAAGTTTAAATAAGAATATATACATATTGTTATTAAATGAAAACATTTGAAATTAT
AAAAGTAGTAAATATTTTTTAGTAAATTTAAATATATATATAGTAAAAGTGAAGCTGTTTTACTTCCATTTCCAGAG
AAAACCTTTACTTAAATTTTATATAGTTTTTTCAGAGTTCTTCTACACCTGAAAAACACAGTGGATTATTTTTGTGTA
CAAAAGAAAAGAAATCATTCTATATGTATCTCCTTTACTTCCACTCTTTTTCTTTCCACTTAATTCATACAGATAAACT
TTACCATTTAAATGGCCTCTGGTGATTCTTTTATAAGAATGAACCATTAGATAGTTAACAGTTTACTAATGACAGACA
TTTATATTGCTCCCAAGTTGTTGCCATTGTTTATTATTCTTTAGTATTAATTCCTAGATAAGTTGCTACATCA
AAAATAATGTACATTTAATATTGCAATAGTTTACAAGGAAATCTGTACTTTTTTTCAGTAATATATTAGTGTCTACTTTCA
AAAAGCTTTAAATCTGAGCATCATATTGTCTTCTAAATCTTTGACAAAAATTAATGTAAATGAATATGCTATTTTAAAT
TGTCATTTATTTATTTGATTATTAGTAAGATTTAGATTTAGATTTTCTGCTTTTTATTAGCCATTTTCAGAGGGATGAGC
ATTCTCTGCCTATGGACTTTGCCTGGTTTTGTATTGATGTGTTTCTGTTTTCTATTCTCATTTGTAACATCATTT
TAAAGTGCTTTTTATTTCTGGACAATGTTTTTACATTTTTTAAAGTCTCTATTGTGATTTTTTATTAACAAAGTTAGAT
YTATAGAAAAGCTGGAAGAATTTGAAGTTTAAAGATATTCGCTCTCCCTTTCCAGAATATGTGGCAAGAGGGGAAA
AGAAGGGATTCTGAAGGAACACACGGGAAGTCGGCAGTGTGGGAGTGAATGATGATATGTTTCAATTTCCCTTGCTTGTGGTGAT
GGTCTCACTGGTGTATACATTTGCAGTAATTGTCAAGTTGTACACTTTAAATATATGTGCAGTTTATTTTTATCTCAGTTA
CATCTCAATGAACTTTTTTTTTAAGTGGCACAACATACATTAATAAGCTTTTCAGCCAAAAGTAAAACTGAGTTTG
GTCAGAAATATTTTTGTGCTATTTTGGTTAGATTTCTTCTGTACAGTTATAATGGCTTTCTAAAAATAAAYTAGGAAGCC
GGAGAAAGTCACTTTAACTTTCAAGAGTAGGGAACTGAACCCATAAAAAAGTGCTTCCAGGTCAGACTCAGCCTAAA
AAACCTGAAAAATAAATGTGACTTCTGAGTAGCAGTATATGGGAAAAATTTCTATAAATCTCTGAGAATGAAGTTGAC
TGGAGACTACACAAGAGACAAAAGAGATATAGAATTGCCTTAAATCTGAACCATGGAGTTACAGAATGATAATGGCATT
TGATAAATTTTTAGAGAACACTCTTGATAAACAGGCACACTCAAAAATAGCTTTTTTGTGTTGTTGTTGTTGTTGTT
TTCTGTGCAAGAGGTGACAATTGAATGAGGTTCCAAAAGTAGTGTGGGCTTGCAATTGCACACATATTATCAGGCAGGA
TTTGTGCAGTAGAGAAAGGTGACTGAAGAATGTAGTGAAGGACATGCTACTGGAAGAAGCTGCCAAGTGACATACACA
GGGCTGTGAGTCAGCCAGGTTGAGGCTCTGTCCAGTGGGACAGCAGGCTCTGTCTCCACAGTGGGGACTGCCTGAGAG
CTGGGTGCTCTGGTTTCAGCCATTGTAGCACAAAGGCACTTGTATAAATTTCCGTGAAATGGCTTGAAACCTACTTTGCC
ATAAGAATGAGATAAATTTTTAATTTCAAACTTTAAATATCTTGATTAGAATAAGGAGGAGGAAGAGAAAGAACAGGCA
ATAAAAAGTTATTTATTGATTGATTGACTTAATGCAGCTAGCTGAAGGTTGAGAGGAAGAATCCGGCTCCAGAGCTGT
AAAGCCAGGGCTCAAGTTTCAATTTGGGCATTTCCAGCTTTGAACAACAGAAAAACACTGTTTACCTTTTCCAGAACCT
CAGTTTCTTTAGATCTGTAAATTAGCAATAAAAACTAATGTGCCCTTCAAGGTTATGGTAAAAATCAAATATCTTATGC
CTGTGTAAATCTTTTTCAAAAACAATAGACACTGCAAAATATGGGCTCTTATGATGATGTTTTATTCTTCACTGGGA
GCATTGATGGATTGATTGTTACTTTTTCAATAACTTTTTCCATATTTGCTCTAGTTTTAAATTTGCAAAATTTAATTCAG
TATTGTTTTATAATAAGACAAAAGCTCTTCTTTAAGGTTGGGGCATTAAATGTTAAAAAAGAACTGTTACATCA

[illegible]

216/375

TGGTTTAGTCTTAGGAAGGTGTATGTGTCCAGGAATTTATCCATTTCTCTAGATTTTCTAGTTTATTTGTGTAGAGGT
GTTTATAGTATTCTCTGGTGGTAGTTTGTATTTCTGTGGGATCAATGATGATATCCCCTTTATCATTTTTTATTTATKG
TGTCTATTTGATTCTTCTCTCTTTTCTTCTTCATTGATCTGGCTAGTGGTCTGTTTTGTAAATCGTTTCAAAAACCAG
CTCCTGGATTCAATTGATTTTTTCAAAGGGTTTTTCTGTCTCTGTCTCCTTCAATTCTGCTCTGATCTTAGTTATTTCT
TGCCTTCTGCTGGCTTTTGAATGTGTTTGCCCTTGCTTCTCTAGTTCTTTAATTGTGATGTTAGGGTGTCAATTTAG
ATCTTTCCTGCTTCTCTTGTGTGCATTTAGTGCTATAAAATTTCCCTCTAAACACTGCTTTAGCTGTGTCCCAGAGATT
CTGGTACATTGTATGTTTGTCTTATTAGTTTCAAAGAACTTATTTATTTCTGCCTTYGTTTCGTTATTCACCCAGTAG
TCATTTCAGGAGCAGGTTTTTTGATTTTCCATGTAGTTGTGCTGTTTTGAGTTAGTTCTTAATCCTGAGTTCTAACTTGA
TTGCACTGTGGTCTGAGAGACTGTTTGTATGATTTCTGGTTTTTGCATTTGCTGAGGAGTGTTTTATTTCCAATTAT
GTGGTCAATTTTAGAATAAGTGCAATGTGGTGTGAGAAGAATGATATATTCTGTTGATTTGTGGTGGAGAGTTCTGTAG
ATGTCTATTAGGTCCACTTGGTCCAGAGCTTAGTTCAAGTCTTGAATATTCTTGTTAATTTTCTGTCTCGTTCATCTGT
CTGATATTGACAGTGGGGTGTAAAGTCTCCCACTAGTATGTGTGGAAGTCTAAGTCTCTTTGTAGGTCTCTAGGAAC
TTGCATTATGAATCTGGGTGCTCTTGTATTGGGTGCATATGATTTTCAAGTAGTTAGCTCTTCTTGTGTCATTGAACCC
TTTACCAATATGTAATGCCCTTCTTTGTCTTTTTCTRTCTTTTTTGGTTTTAAAGTCTGTTTTATCAGAGACTAGGATTA
CAACACCTTTTTTTCTTCTTCTGTTTGTGTTGTAATCTTCTCCATCCCTTTATTTTTGAGCCTGTGTGTGTGTTT
CACATGAGATGAGTCTACTRAATACAGCACATTGATGGGTCTTGACTCTGTCTAGTTTGCAGCCTGTGCCATTTAAAT
GGGCATTTAGCTCATTTACATTTAAGGTTAATATTGTTATGTATGAATTTGATCCTGTCTATTATGATGCTAGCTGTT
ATTTTGCCCATTAGTTGATGTAGTTTCTTCATAGTGTGACGGTCTTTACAATTTAATATGTTTTTGCAGTGGCTGTTA
TCAGTTTTTCTTTCCATATTTAGTGCTTCTCCAGGAGCTCTTGTAAAGCAGGCCTGGTGGGGACGAAATCCCTCAGG
ATTTGCTTGTGTTGTAAGGATTTTGTCTTCTTCAATTATGAAGCTTAGTTTGGCTGGATATGAAATTCGGGTGCA
AATCTCTCTTTAAGAATGTTGAATATTGGCCCCACTCTCTTCTGGCTTGTAGGGTTTCTGCAGAGAGATCAGCTGT
TAGTCTGATGGGCTTCCCTTTGTGGGTAACCAACCTTTCTCTCTGGCTGCCCTTACATGTTTTCTTCAATTTCAACC
TTGATGAATCTCAGGATTATGTGTCTTGGGGTTGCTCTTCTCAAGGAGTATCTTTGTGAGGTTCTCTGTATTTCTGAA
TTTGAATGTTGGCCTGTCTTGTCTAGGTTGGGGAAGTTCTCCTGGAATAATCCTGAAAAGTGTTTTCCAATTTGGTTTC
ATCTTCTCCATCTCTTTCAGGTACACTAATCACATGTAGGTTTGGCTTTTACATAGTCCCATATTTCTTGGAAAGCTTT
TTTCATTCCTTTTCAATCTTTTTTTATCTAATCTTGTCTTCATGCTTTATTTCAATTAAGTTGATCTTCAATCTGTATA
TCCTTCTTCCACTTGATCAGTTTGGCTATTGATACTGTGGTAAGCTTACGATGTTCTCGTGTGTGTTTTTCAACT
CCATCAGGTTATTTATGTTCTTCTCTAAACTGGTTATTCTAGTTAGCTATTCCACTAACCTTTTATCAATGTTCTTAGC
TTCCTTGCATTAGGTTAGAACATACTTTTTTAGCTTGGAGGAGTTTGTATTATCCACCTTCTGAAGCCTATTTCTGTG
AATTGATCTAACTCATTTTCTGTCTCCAGTTTGTTCCTTGTCTGGCGAGGAGTTGTGATCCTTCGGAGAAGAAGAGGCAT
TCTGTTTTTTTGAATTTCCATCTTTTTTGCCTTGTCTGGCTTCTTCTCATCTTCATGGATTATCTACCTTTGTTCTTTGCTG
TTGGTGACCTTTAGATGGAGTTTTTGTGTGGTCATCTTTTTTGTGATGTTGATGCTATTGCTTTTTGTTTTGTAGTTT
TCCTTCTAGCAGTCAGACCCCTCTTCTGCAGGTTTGTGGAGGTCCACTCCACACCCTGTTTGCCTGGGTATCACTAGC
AGAGCCTGCAGAACAGCAAAATTTGCTCCCTGCTCCTTCTCTGGAAGCTTCGTCCAAGAGGGGCACCCAACAGATGCC
AGCCAGAACTCTCTGTATGAAGTGTCTGTCAACCCCTGCTGGGAGTATCTCCYATCGGGAGGCACAGGGGTGAGGGG
CCAACCTTGAGGAGGGAGTCTGTTCTTACAGAGCTTAAGGGCTGTGCTGGGAAATCTGCTGTTCTCTTACAGAGCTGGC
AGGCAGGAACATTTAAGTCTGTGAAGCTGTGCCAAAGCCACCCCTCCCCCAGGTGCTCTGTCCAGGGAGATGGGA
GTTTTATCTGTAAGCCCTGACTGGGGCTGTACCTTTCTTTTCAAGAGATACCCTGCTCAGACAGGAAGAATCTAGAGAG
GCAGTCTGGCTACAGCAACTTGTGGAGCTGCGGTGGGCTCTGCCCAGTTTGAATTCCTGGCAGCTTTGTTTTACTG
TGAGGGAAAAACCCTACTTAAGCCTCAGTAATGGCGGACACCCCTCCCCACACCAAGCTAGAGCATCCAGGTGAC
TTCAGGCTGCTATACTGGCAGCAAGAATTTCAAGCCAGTGATCTTAGCTTGTGCTGCTGCTCAGTGTGGGATTCACT
GAGCAAGACCCCTTGGCTCCCTGGCTTCAGCCCCCTTCCAGGGGATTGAATGGCTGTCTCACTGTTGTCTCAGGTGCCA
TTGGGTTATGAAAAAAATCTCTGCAGCTAGCTCAATGCCTGCCAAACAGCCACCCAGTTTGTGCTTTGAAACCCAG
AGCCCTTGTGGTATAGGCACCCAAGAGAATCTCTGTATCTGTGGCTAGTGAAGACCGTGGGAAAAGCATAGTATCTGGG
CTGGGTAGCTTCGTTCTTACGGCACAGTCCCTCTGCTTGGCTTCTGTGGGCTGCACCCACTGTCTAACAGGTCCAGTGA
TTCACAGGTGGGGAGACGCCCCACCCTGCTTCTGCTTGGCTTCTGTGGGCTGCACCCACTGTCTAACAGGTCCAGTGA
GATGAGCTGGGTACCTCAGTTGGAAATGCTGAAATCACCTGCCTTCTGTGTTGATCTCACTGGGAGCTGCAGGCCGGAG
CTGTTTCTATTTGGCCATCTTTATCTCTTACAATTTGAAAAATAATGATCTTAAATTTTTGTCTCCACAAACAAAAGC
AAGTAAATTAATCTCAGTAATATAGTTTTAAGAATAGTTGCTCTTTTTTAAAYTGTGGCAGGGGCATAAGGGATAAGAGA
AGAAATAGTTAAGAACACAGGTGGGTCAAATCTACTCTCTGGCACTTACTAGCTGGGGAACCTTTGGGCAACTCACCTA
AACCATTTAAGCACTACTAGTTGCCCTCTTCTGGAAGATGGCAGTTGTAATAATACATAATTGATAGTGTCAATTATGAGA
TAAATGACATAATGCAATAAAGTTATTGGCCATGTGCTTGGTACAAAATAAGTACTCAAAAAGTACTTCAAAGTAAT
TTTTTATTCTAGGAGCCATTCTTACAGGTGGAAAAATTGTGCCTTTTGTCTTACATTTTACTTTGCAATTTCAAGATG
TCTTCAAGAGTATGACCTCATTTTTATCCCTTCCACAAATATGAGACATAGAAATTTGTTAGCTACATTTTCTAGGGAAAA
AAAACCGAGCGTCAGGAATATTAAGTGAATCAGCCAAGGGTCTACACCTCATAATTAGCAGGATCAAGACCAATGAAAG
TGCCTCTTGGTAAGATCATACTGAAGCTAACAGACACGTGCAGGCCTCCTACAACATAGGTAGCCATGTTTAGTGTAG
GCAGCAGTTGGACTTCTGTATATTCAATTTCTGGCACTGGAGACTGCTTCTATTATAGAAGTTGTGACCTTGTCACTCAT
CAAGCAGATGGCATTGCTTGTATTAGAGTCAGGCCATATTTAGAACATTTCTATAAAGCCATTCTCATTTGGGCAACAT
TTTTGCCAATTGAAGTGTCTTTTCTACTAATTGAGCAAAACAAATCATGGGCTATCCACTACAAGGGCTTTCCACCAC
CCATATTTTTCAGGAAGGCAGGTGTTGAGCTTATATTTTTCAGAAATATATTTCCAGCTTCATACACTCTTAAGAGAACATT

217/375

GAAGCCTCTTTGATGAAGGTGAGGGTCTATAAACATGCTTGTATTTCATTATAAGGGGATTGTGATTGTCTCATAGAAA
AATGACTTTAAGAAATAGATGTATCCTGAAGCAAGATAATATGAGTGTGAGGCTGGACACGTAATAACAAGGGAAGGT
AGTGGGGAAGGCTGAGAAAAGAGTACTGTAGACTTTACATCACAATGCTTAAATTAATCTAAAATGTAAGCTATAAA
ATAGACTAAAATTATATATAGACGTATGTGCGTATGTGTGCATATGCATAAAAGTGTATGTATCTCCATACTTCAAAGG
CTAATATTACAGATAGATTCAACAATCAAATACGGAGTTAGTTTTGAAGGAAAAGCCAAATAAGACACCTTTGCTAGA
CTTTAAAATTTTATTTTAACTGAAACTACGGTATAGACATAACCATATAAACTAATCTATTTACTTGTAAAATTAATTG
TTTCATTGTCTGAATCAGATGTGAGTGTATTTAGATAAGTCAAGGTAGTAAAAGAGTATAATAAGAAACACTGAGAC
CCAGGGATCATGCTAACTCAGACTTCTGTCTTGAGTCTGCCACATAAGAGCAATATTTCTCAGGCAAATTATTTTCAT
AGTTTTGAACCTTGAAATTTCTCATCTGATAAATGGACACACCAATGCCTAACACATAGGGTAGCTGTGAGGATTAAATGA
CATGCGCAATTTGCATGGCTTCCCTCATCAAGTTGCCACTTGTATTAGTCGGCTAGGGCTGCTATAGAAAATACCACAAG
CTTGGTGCTTAAAGCAACAGAAATTTATTATCTCACCCTTCTGGAGGCTAGGAGTCTGAGATCAAGGTGTTGGCAGGGT
TGGTTCTTCCGAGGGCTGTGAGGAAGGATCTGTTTCAGGTCTTTTCTTAGCTTGTAGATGGCCTTCTCTGTATTT
TCTCTTCGTCTTCTCTGTACATGTCTCTGTGTCCACATTTCCCTTCATGTCTCTGTGTCCAAATTTCTCTTGTCTT
CTCTCTGTACATGTCTCTGTGTCCAAATTTCCCTTTTATTACAAGGACACCAGTCACATTGAAGTAGGGTGCATCTTAC
TCCTATATGACCTCATCTTAACTAATAACATCTGCAAAACCCCTATTTCCAATAGGGTCCCATTCTAGGGTACTGAGAG
GTTAGGCTTCAACATTAATTTTGATAGGGGGACACAGTACAACCCATAACAACACTCAGAAGTCACTTTCTCAGACAGA
CCATGCTTGACCACGTATGTAGTTTGGCTGTGTCCCCACCAAATATCCTGAATTGTAGTTCCCATAAATCCGCACGTGT
AGTGGGAGGGACCAAGTGGGAGGTAATTGAATCATGGTGGCAGTTACACTCATGCTGTTCTCRTGATAGTGAGTGAGTT
CTCATGAGATCTGATGGTTTTTAAAGGGGCTTTCCCTTTTTTGTGTTGGCACTTCTCCTTGCTGCTGTATGTGAAGAAG
GACATGTTAGCTTCCCTTCCACCATGGTTGTAAGTTTCTGAGGCTTCCCAGCCATGCTGAACTGTGAGTCAATTAA
ACCTCTTTCATTATAAATCACCAGTGTGAGGTATGTCTTTATTAGTGGGATGAGAACGGACTAATAACAACACTACCTTT
TCTAAGAACAGTCTTACCTTTCCCTAGCACACAGTCCCTTGCCCTATATAATATGCCAAAGTAAATCATAGATCAT
TTATTTTCTTATTTCTTTTCTATCCCCACACTAGTCTGAAGTCCATGGTGCCAGGGCCCTACTTGTCTTGGAGGTTGT
TCTATTCTGGGCTTGGAGAACAGTGCCTGGTACAAAATAGATCCTTAACCTCTGGCTTGGAGTTAGGGCTCAATAAGTA
ATAGGTGGTATAAGTATCTAAAAAAGAATCTCATTCTCTATCCAAATTGGTATTCACTAGCCATATGTGAAAGAACTA
AATTTTCAATTTTATTTTAAATAAATCTAAATTTAAATATCCATTAGTGGCTATTATATTGGACAGCACAGATATAGAAC
ATTTCTGCTACTGCAGGAAGTCTATGGGACATTTCTAGACATAGAAGCATAGATGAGGATATAATAGTGATAATTCAG
TTCAGACCCGGTGTGCTGCCAAATTCACAACACTGCCCTGCATTGCTGCCCTCTCATGACACCACACAGCTCCAG
TTGATTTGTTCTTCTTTATGGTACCAGGTGATTGGGTGATTGCAAGCATTTTCTTCTTCATTATTAAGTTAAAAAT
ACCCCTTGAAGTTTGAAGGCTGTAAAGGGGTTGTCTTGAGAGTCCCATTAAACATTTATAGTGAATTTCTGTGGCAGCA
ATTTTTTATTTTAAATTGTTGTTGTCTTTGCTATTAGATAAGTAAGCAGTAGGCATRGATAATTAATGTACAGATTTCTG
TTTTACACAACTTTAAAGAAATGACTCTTTGAGAAACATGTCTTTAAGGACAATGAACTGAGATATCCCTTACTTGAGGAT
AAAATATGGGTGCAGGTACAAGGAGTCAGCAGGTGTACGTGTGGGCTCATTTCTTCCCTCAACCCTGGAAAGTATATA
GATTCCTACCATCCTTGTTCAGCCTCTGCCTTAGGGATAAGCAGTGTGGGGTGATTTTATGCTCAGRAAGTAACCAAA
GGCTAGCAAACATCTCTCATTGTTGGCAGTAAAAACCATTGCTATGAATAACAATCTATATTTTATAAAACTATTTTGG
CTTCACATAAAAAATCTGATGCTTCAAGGAACATACTCCAATGTGCCTTGAAGTATAGCACATACTCCAATGTGTTACTG
AATCCTGAACCACACCCCTAAAGGAGGCATTGATTGATACCTGGCTTAAACAAAGGCTTTGGGGTGGGGTGAAGGGA
TAATACATAATGCAGTTAGAAAGTGATAGAAAGCATATTGCTTATATAAAATTCAGTGTAGGTAAGAATAAAATATGA
AATACTATGTGGCAATGAACTTAGAATATGCTCCAGTTTTGGAAAAAGAATAGTAAGATAAAACCCCTAGAATTTGGAACA
TTTTTAAATAACCTCTATTACTATCATTTTAAATCTTTGAACAGTGACAAAATATCCACCTGCTTTGTGACTTTTCTGA
AAAGAATACATGGTTCACAGGGTATTCTCTATTGGAATACTCATTCACACCTTCAAACCTTATCACCATCCAGTTAAATTTG
AGGAATGGTAATTGATGACCTTAAAGTGAGTCAAGTCACAATTACCTGAAGAACTAAAAATGCTACTGGAAGGACTAGAC
TCTAAGTTGGTACCTAACTAATTCTTATTGCCTGAATGTGGTTGTAGAGTAGACCCTTCATTAGGAAGTGAATAGGGGA
AGTATGAAAAATTAATGTGTACAAAATCCAAAGCTTCTGATAGGTCTTTTGGGCTATTTTGAAGAATAAGACAAACA
ACAGAAGCATTTATAATTGGAGGATTATAGAGCCAACAAAGGCAAAGTAGGAGCATATTTATCAGACATAATAAGACAG
AAATTAAGATCTTATTTATGTTTGGAGCATAGGAAGCAATAGAAGCATATATTTTGAAGGTCTAGACATGCCTCTA
TTCATCAATGCATTTTAGTATTTTAGCTCAGCGTTTATTAAAGTTATTACCTTAATTTATTTAATCAAAATATTGACTC
TATTCCTCATACTGCAATAACTTGTTACATGATTTGGATGTTAATATGATTTTTTTTACCCTGAAAGTTAAACTAATGC
TCATCCTTTCACTATTAAATATTAATGTCTTCTATTTTAGTTTAGCATTTAAAAAACAAATTTGTAGAGATGGGATCT
CACTGTTATAAAAAAGCTTTCCATTTTGTAAACTGCAAACTTGCAAGTTAGCTTAACTAAAATTACATAATAGAATTT
CAAATTAAGAAATTAAGTCACTCATTTGTTCTGTAAAGCAGTCACCTTGAATAAAGAAATSCATGGTTCAACATATTT
TTAAGAATTCATAGTACTTTTCACTTTTATGGGATATAACTGACAAATGAAATTGTATATATTTTCACTGGAACAAC
TTGATGTTTTGATATACACATAAACTTTATGAAATGACCATTACCATTGTTCCATATAACCATTTGTTTAAACCATCT
AATTCCTCTTGTGACTTTTCAATTTAAATGTTTATAGTATAGAAACCTCATTTTCAATTAATACTTCAGAGGCCAACCTGTTA
TTTTATAGAATGCAACAAACATTACTTTAATGTTAACGACCTTAAATGGAAACCAGGCATTGGTTTTTTTTTATTTTGT
TTTTGTTTTGTTTTTTTGGAGACGGAGTCTCACTCTTTTACCCAGGCTGGAGTACAGTGGCACAATCTGGGCTCACTGCA
AGCTCCGCTCCTGGGTTTCATGCCATTCTCCTGCCTCAGCCACCCAAGTAGCTGGGACTACAGGCGCCCGCCACCACGC
CTGGCCAATTTTTTGTATTTTTGTTTTTTTAGTAGAGACGGGGTTTTACCGTGTTAGCTAGGATGGTCTCAATCTCCTG
ATCTTGTGATCCRCCGCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCGCGCCAGTCATTGGTTTGT
AATGCCATAAAGAATCCATGAATAATATAGTCGTGATTTATTTTTGAAAGAGAATGTTCTTTAATAAAGCATATGTT

218/375

TTCTAATTTACACTTGAGCAAACCTTTATTTTAAAGAAAAATTGAGAAATTTATGTTTCAGAGTTATGAGACACCGTCT
 TCTTATCTAAGATATGAAGGATGCAGCAATAAATTATCCAGATGTTTTGGCTATAGTCTTTTTTTATTGTTGAGTAACA
 AATTTCCATACACTTAGCAACTTAAACAATATCCTTTTTTTTTTTAATGTGCGAGCTCTTTAGGTGAGAAATTCAGG
 ATAACAGGGCTGGTTTATGTGCTCAGAGTCTCAAACCTCAAGGCTGAAATTAAGGTGCTAACAGCTGTGATCTTATCTG
 GAATCAAGGTCATCTCTCAAGATCATTACTGCCACTGTTGGAAGAATTCAGTTTCTTGCAATTATAGGATAGAAATCCC
 TCTTCTTTTGTAGCTGTTGGCTGTAGCCCCCTGTGACCTTCTAGAGGCCACTCTTGGATTCTTATCCCATTGGTCATC
 TTCATCTCAGCCGTGGAAGACCTCCCCTCTCACACTTCATCTCTCTGACTTCCTTTTTTGTCTTAGCTAAAGAAAGCA
 CTCTGCTTTTATAGGTTTTATAGGACTCATGTGATTAGATTAGAACCACCCTGATAATCTTATCTTAAGGTGAGCTGAT
 TAGTAACCTTAATTGCATCTACAAAAATTCCTTTTCCATTGTAAAGTAATATAACCGTGGAGTAACACACAGGGCTGAGG
 GTAATAGGAGTCATCTTAGAATTGTGTATTAGCCAAAGATGTGGAATTCCTATCAATAAATTTAAGCAGTGTTTCCATTA
 TATTTGAAAAGGAGAGAAGATTAGGGTGGCTGATCATCTTGTATTTAAATGCTAAGAAAGACAATAATCACAGCCAARA
 AGCTTGGTCACATGTTGACTTTTTAGGAACCTCAATTATAGCAATTGCAATCAGAATTGATAGAGGCAGAAATCATACTGCAAAGG
 CTTAAAGGAATGCTAAGAGTTCTACCATTGAGAAATAAAGAACTACCAGGCAAAATGAAGAAATAACCATGTAATTGA
 AAACTGCCAGAAATAATTCTTAATTAGATGTAGACCAATGTCTCAATAGTTGGATAACAAGGCAGAGGCCACATAAT
 TCTCTGTGCATCAGTCTGCTCAGACATTCTCATCCATTGCAGATTAAAGCCGAGTACTACCAGTTTGTGCCACAGCG
 TCTCTGTGGCCTCCTCCCTGATGGCTGCCTGGGAACATGTTCTCTACTGCATCACACTGCCCTTCCAGTCTCTCAGGA
 AGCTTAAAGGGGTAAAGCAAAGGGAGGAGACTGAAAAAAAATGACAAATTCGGGAGAAGATCTTTTAACTTTCTGTTC
 ATTAAGTGAGAATTTGTAGATAGAGTGGAAAGAACCATTGTGATCAGGGGCAGGAGTATGTGAAGGAAAGGAGGGATAG
 ACTGAAGATGTCAGAGACAGAGAAGGCCCAAAGGATGGAACAGGGGATGGAATTAGGAGAAACGTCTGAAAGGATAGA
 ATGGGGATAGAATTAAGAGCGTGCATGGATCCATTTAGTCTGGAAAGTGAAAATCTTATTTTTCTGAAATACAGGAAAA
 GAACAGAAAATGAGTAGTGGTTTTCAAATGAGGGGAGAAAAAGCAATTACATGTAAGAAGGCTTCTATCTCTCAACACAA
 CGGGGCTGCTTTATATATATTTTTCTTCTGTAAAGTGATAAAAAATAGTAAGGCCAAATAATATTTATGATAGTTAAC
 TGATATGATGCATATAAACTGCTTAGAGTAGCATATAACCACATTATAAATGCACAGAAATGTTAGCTATTTTTTACTAT
 CATTGCCATTATTTATTTCTATTGACAGTAAAGGAAAGTGAGGTAATGTTGTGAATTTAAAGTAACATAAAGCTTTTC
 AATCACTTGTTAAAAATAGCATTGCAGAGAAACATTGAACCCTCCTTAAATGTAAATAGCAGGATTATYGAACATCTA
 GTCAAGATGACTAATCTTTTTTCTAGTAACGCTCAACAGCTCTAGAAGGTACAGAAGCGGTGGGTCAAGGTTTATA
 AAAGTTCAGGAATTGGAACCTCTGGGGACCTGGTTGTTCTCATGAGGGCACATACCAAGATCAGGGTGAGCTAGGAAGTT
 TAAGTGATAGGAAGATAATAGATTTATTTAGAGAGGGGAAATTGAGACAGTTTCAAGCCTCGGAGATGGAACAGAACAA
 CAGAGCTCCAAGCACTGGGATGCAGGGCTGGAGGTGACCAAGTCCACGACTTTGTCTTTCTAAAGTGAAAGTGAGGTGA
 GTCTGAAGAAATTATCACTGTGATTAAGGTTGTTATTGAGGGCAACAGGGCAAGCTAGCTTAGGAAGAAAAAGTTTGGC
 CTAGGTRTAAGATGTAGTTGTCTAAATATTGAACAGCACAGATTTTAGAACATTAGCATCACCACAGAAAATTCGATTGA
 ACAGCACGTGACTAGAGGTACAGGAAAGTGAGAGGGTAGGGTCTTACAGAAAATGTTGGAGCAGAAGAACTATGCCAA
 ATGAGGATGTGAGCAAGGATATTCTGTATTTTTGACAATTTTGAAGCATTATTTATTATTTTAACTTTCTGAAATTTG
 GATGAGTCATGCAATTGATGTGCTCATTTAATAAGGTTAGTGTATTATTTTGTCTGAAAAACCATTAAAGCAATTAATA
 ATGCATCTCACAATCAGTGTCTATCATAATATCAATGAAATATGGTAAGAGCAAGGCCAAAGGAAGGGTTTCTTACTGG
 GTGGTGATCACAACGATAAAGAATCAGGACAAAAAGACTGAAGAGATGTGGTGATAATGGGATATGAGCTGAGTTGGAA
 AAGAACTAGCCCCAAGATATTAGTCAGCACTTTGGAGGGGTGATGAATTTGCCATGGTTTTAAAGTACTTCTTTGAGTTT
 ACAGCACCCGACTCTGTGTTCTCAGACCTTATGTTGTTTGAAGATTGGGCTGATGGTGAGTGTGAGGAGAAATGATGTCA
 GTCATTCTAAATAGTCTCCCAGGTGCTGATGCGCTTTGGCAACTACAGTAGGTCTTCTTAAAGATTGGGCATGGAAGA
 GACAAATGTGCGAGAAAAATACCCCTCTTGTTTTGTAGTGGAGAAAATCAGAAGAAAGGGAGAGAGATCGGGGTGTGCCG
 AAAGCAAAGCCAATGTGATCATCAAGATAATAATAGCCATACATTAAAGGTAGTCAAGATCATAGACTGAGATCTGAAC
 TTGGATGGAGATGATGAACACAGTTTTAGTCTCAAAAAGTCAGCTACATCAGATGGAAGTGAAGTTGTTGTT
 TTGTTTTACTTTTTGATGCTGTAATAACTCTGGCATGACTTTTTCAGCAAAATTAGAATTAAGACCTTTTAAATTTGTC
 CCAAATGGTTATTGATACCTGCAATAATACTTTTCCCCCTGGAATTATATTTTCTCTTAAAAATATATGTGTGTATGCA
 TACATTGTTATATATAGTGTGTGGGTATGTGTTTGTGTGCATATGTGTGTGCATATATATATATAAAGAAAAATAGTGTA
 GCGGAAAGAACTCTGTTTTCTAAGTCAAAATATCTGATTTTGAACCTTGGGGTCCAGTGAGCCACTTAATTTTCAGGTTTA
 ACTTCTGGCAAGTTTTATCTTCTGAAGCCAGAAAGTCATTTTCTTTTAAAAAGAGGCAATACTTGTAACCTTTTAAAGA
 TCAGATGACATAAAAGATATGAAAAATATAAACTATAACGTATAAATATACTGAACTGTAAAGTCATACAAATTTAAGTC
 ATTAATGTTACTGATTGGAGTTCATTTCTCAGATTTACATAGTTGTTGGGCACAGAAAATTTGGAACCTTTGGCTTTTC
 ATTCTTGACAGACTAATTTAGCATCATATTCTTGTCTTTGCTGATTTATCAGGTAAGGAAAAAGTCAAGTAAATGA
 TTTGGATGCCTCACTGCCAGGGAATGCTTGATAAATTTAAAGCCTGGCTTCTAGGGACATTTCTGACTACTGTTGTTTA
 TAACCAAGATCTTTTGCAACCTTAGACTTCCCAGGAAAAGCCTGGGCTTTGTTGCTGCAGGAAGGAGAACAGGGAGGAA
 AATATCTTTTCAGATTTAATCAGTGAGAACTACTAGGAATTAGCCACTATGCTAGGGAATACCCAATCATTTATTTGAT
 ACTTTTGTAAGCTGAAGCATCATTTAGGGGCTAGCAGGTTTGTCTTCTGATCATATTTCAAAGCCTTCACCTGGGTGAA
 CTCCTGTGAGAACCTATAATTCAGGGATGCTAAAGTCAACATGGTGACAAGAAAGAACTCAGCTGGCTTCCATTCAATG
 CATCTCAGATGAAGGTGCTCACTCCAGGAAACATAAAGGATATCCATTAAATTTTGTGTTGTAAGCAAAGG
 GTATTGCTAATATACAACCTCTGGAATAGACCTGATCAGTTACCCAGTCTCTGGAAGAGGGTGGTAATTGAAAACTAA
 TAAGGGCAGGCCCTAGTCTAAGAACTAAATCTAAGACAGCCACCTGAAGTGTGAAGATGGAAATGTCAGAGTTGAGTC
 TGGAGTGTTTTATAGGCTTATAGCTCTAAGTTGCCCTAATTGAACCTTTTACAAATTGAACCTTTTACAAAGAAAGTGGGGAT
 TTATTTATACTCCTACTCTAGGGGGCCACAAAAAAAAGAGGAAATGAGAGTATAGGAGATTTCTCTAGGTTATCATA

219/375

AGAAAGAAGTCTGACAATACAATCCTTGTTCATTTATCTTTTTTATAATAAACCCACAAAATATTTAAGAGCTGTTGGAA
TTCTTTGTTTCTTCCCCATGCTGGCTATTTTGCCATTCTCTTCATCTCAATACTTTGCTGAGTAAAAAGTCTTGAAACCA
AAAATATCCCTACAATTCATGACCTTGAGTGACTTCAAAATTCAGTTAGACAAAACAGACAGCTGAGTTCTGTGGTTCT
CAATCTTTGTACTTTTAAAAGTATTCATGCTTTGGTTCTACCCACAAAGATCCTGATTTCACTGGGGCTGAAGTGTGGA
AAGATTTTATAGCCACCAAATCACCTAATGTGCAATCAAGGGTGAGAACCTTATTTTCTCATATCCCCCTTCCCTTATA
TCCACTGATCTTGACTTCAGTTTTACCTTGGAATTCACCTCCATGGCCACACTCTGAACTTTGTATCAGCCAGAAGT
GCTCCAACCAACCTCAAAATCTTAACTCAAATATCCACACTCTAAGCATAGTTTTCTTTCTTTCTAGCTCCTCTTAT
TACGTTAAAGACCTAATAGTCTTATTTCTCAACTGCTTTCTTGCTAACCCCTTCATTGTTCTCCTCATAAACCCAAACAG
GAGATAACAAGCCAGGATTAATCCACCTGTGTGATCTCCCCATTTTAAACCTTGTTGTTTCCAGAGAAAAACACAACCA
CTTACACTGGTGCCACAGCAAGTTTCATACTCTCCAGACCCAAATGGATGGAGCCTCAATACTGCCAAAATCCCATTCTAT
TTCTCTAGTCAGCCTTGTGTCTTTTTTCCCAATAAAAACTCTGTCTCTTGGTCACATGGACATTTCCATCCTATTTCT
GTTTGAGGTAGAAATCTGCTCCTGTACCTTGAGTCCCACCTGCTTCTGCCCTTTTCAGTTGACTTGCTCCTTACCTGGCC
ACTTGTCTTGGATCACCAGCTTTAGCCATGGACTAAGTCTTTAACATGGGYATTTAAACATACTTAAACACTTCCCTTC
AAAAAGCAAAGCATAACAGTGCTAAAGCAAATTTTCATGGGTCTCCTCTGCTTACTGCCCTTCTCCTCTAACAGCCA
AATAATTTTGCATCTACTCTCAATTTTGCATTTCTTACACCAAATAGTAGTGTAGGCCACTCTCTGTGCATAAAACAGTCT
TTTTTCTTAGTCTTTGTTTACTCAGATTCTCTTACAGTATTTGAAGAGTGTAGGCCACTCTCTGTGCATAAAACAGTCT
ATTCCTCCATGGGCTCTAGCTAACAGCCTGCAGTTTGTGCTAGTTTCTTTGGGGTTTCTTGATCCTCTGCCCTACCACTG
AAATGGCAGTGTCTTTTGTCTCAGCCTTTCTGCTGTTACCCCATATTCAGAGGTATTTAGCCATGGCTATGCATCAGA
ATCACCTGCAAAGCCTTTTAAATGTCAGCCATCCGCTTGCTATGCTCGATCATCTGAATCAGAATTACTAGGGATTGGG
GCCCAGGCACCTAAGTTATTCAGAAATTCACAGATGATTGTGATATGCTGGTGGTCTTCTTACATCCATGCCTTCTC
AGGCATTCCCTTTATCAGTCTTTTCTGATATCCTTAGACCTAGGCTTATATTTTAGATATGTCTGCACAAGATGTC
CAAACCTACTGATGTGTCCAAGAGAGCCTCCTTGCTCCATTCCTTCCCCTCTCATCCAATCTGCTCTACCACCTCCC
CCTTTTCTCCTCCCCCATATTTTCTGCTGAATGAGTGACATCAGATTTTATTAATTTGTACAAGCCAGAACTTGATAA
TCATTTTGAATTGTTTATTTATCCCTCATGTCCAATCAATTTGTCAAGTTATATCAGTTTACCTCTAGTATTCTCCAA
AGTTTTTTATATACATGGGTATTACTTTAGGTTAAGCTAAGTCAAGTCTGTGTTGCTATAACAAAATACCTAAACTGGG
TAATTTATAATGAACAGAACTCATTTCTTACAGTCTGGAAGCTGGAAGTCCAATATCAACGTGCCAGCATCTTGCGA
GGGCTTTCTTGTGTGACATCATATGGCGGAAAGTGAGAGGGCAGGAGAGAGCAAGAAGGGACTGAACCTTGCCCTTATA
AGGACCAATGCCTCCCATGAGGGTGGAGCCCTCATGACCTAATTACCTCTTAAAGGTCCCACCTCTTAATACTGTTA
CAATGACTATTAAATTTCAATATGAGTTTGGGAAGGGGAGAAACATTCAAACCATAGCAGCCACCATTCTGTCTCT
GAAATATTACCACCACCTCCTGACTGTATCCTGTGTGTTGGCTTTGCTTACTCCCACTAATCTGTTTTCACACATG
CTCAGAACATTTTTTTCTAGAGGATAAATATGATAATATATTTTCTGCTTAAGACTTTTTCAGTGACTATCTGTTGCT
TTCAGAAATAGAGGCCAAGCTGTAACATGGCATATATGGCCCATCAGAACCCGACGCTGTTCTGTTCTTTTGTGAGGTC
CTCTCTTTTCATTTGTCACACAGTTTTCATCACAATTCTCTGGCGTTTCATGATTCTCTCTTGTCTCTGAGCCTTTGTTTC
TTTGTCTGTTTTTGCCTAGAACACCTCTTCTCTTGGCTCAGGTCTTACATCTTCCATTCTGTCAAGGTAACCTCCTCC
TCATGTTCCAGCTCATATCTGATATATCATCTTTTAAAGGATGTCTGCCATAACCTGTAGAATGGGCTTAAGAGGGCT
TCCTGTTTATTCTCATACTGTGTACAATGAAAATCTACTCATTGATTTACTTCTCTCTCCACCCAACTTTATGTTCTT
TTAACATAGAACTTTTAGGCATCGAAGAATCTTTTTTTTACATGACACATAAACTCTCAATGATTGTTGAAGGAATG
AAATGAGGAGTATTGAACTGTAGTAAAAAATAATCRGAAATAATGATCAAGAGAGGCTTTATAAAGGGGAAAGT
CAGTAGTTGAAAAGCTAGAAGTAGAATGAGCTGACTGACTTGAAGAGAGGCCACTACTTAGTGAAAAGCACTTCATTGG
TATGGTAGGAGTTGAAGTCAGAATGCAGAAAATTGAGGAATGAGTGGTGTATGAGTTTTCTGCTGAAAACAAAGTACTAG
AAACAGAGTGGTTTTAAACAGAAATGTGTTGTCTCACAGTTATGGAGGTGAGAATTCTACGATCGAGGTGTTGGCAGGGC
CATGCTCCCTGTAAAGGAGCTAGGGAAGGAAGTGTCCAGTTCTCTCTTGTAGCTTCTGGTAGTTCTTTGCTTGTAGC
AGCATCCATCCAGTCTTACATAGTGTCTCTTCTGTGTACGTGTTTGTCTCTTACATGGTGTCTTTTTATAAAGGCG
TGAGGCACACTGGATTAGGGACCTACTCTTGTCAATATGTCTCTCATCTTCACTTAATGAATACATACCTGCAACAATCC
TATTTCCAGTAAGGTACATTCTCACGTACGAGGAGTTAGGACTTCAACACATGATTTCTGGGGAGACGCAATAAAGT
GTTGGACTTGGGTTTATTCTGTGGTGTATTTATTTGTCATACATTCAATGATCAATATTAGCTTTTAACTCTTATTATTAG
AGTCCACATTTGTAGCATAATATTACTGTGGTTGCCATGGAAGAGAAGTTAGTAAATGACTTTCACTATACAGGGCTAC
CACACTGGTTTCCAAATTTAGCTCTTCAAGGTTGAAGATGGAGGACGATGGAGCTCCTCCACCACAGCACCTCTCTTT
GCCTAATTTACCCATAAGCAAAGCAAGGTTTGAAATCCACCTATCTAAATAAGACTTTTAGACATGTTGGAGGATATA
TTTTTAGTCATAATGTTGATAGCAAATAAGAAGAGAAGATACACCTCAGCAATTGGAGACAAGAAAATCTGATGCATA
ATTTAAAGAAGAAAACGACAAAAGTACGAAATCTTATGTGCACTTATTACCTAATACTTTAAATCTTGGAGATATA
TATATATATATATATATATATATATGTAATTATTAGGTCTAAGTAATACACAAAGTTAAACCTTCACTATCTTATGTTGGA
ATACGTATAGAGGTATAGATATATATAGATATCCTTTCCACACTTATTTTAGCTCTTGAATGCATAGAATAGGAAAA
AAATCAGAATTATAATCTCCATGGGAGCACTTTATACCAAAAAACACAGAAGCAATTATATTTGAAACCTGCTAGAGT
ACAAAATTCTAGATTATCTTTAGCAGTTTACTTTTATTTTTCATGGATAAAAATTTGAAAAGACAAGGGCCAGTGACTCAT
TCTACCATTTGAGAGCATCGCTAGGGAGCATGACATTATCACAGAGACAGATATATGGTGACTTGGAAATTTTTTGTAG
GTAATTCCTATTCTTAACTTAATATGAGTTGCCAATTTGGAACACTGCTACATTATATTTATCACAGAGTTATAACTT
TTAATGGTTTGGAGGATCATAGATCTGACCACATCAATATTTGGCTCATTTTCAAAATAGAAAGTGCTGAAACACCAA
ATACTGAGCTGAATTTTAAAACTTTAAAGCTGAAAAACCACTCATGTACATAAAGTGAAATAAGAAATCAACCTAGTG
TAAATGGCTGCATTTTTGAAATTCATTGTAAATCTTAATAAAAAATATTGTTTTAAAGCCAGCATGTTTGGAAATG

221/375

[illegible]

Fig. 6:216

222/375

AGATTAAATGAGGAAAGGCAAGTCAAGTATTGAGCACAGTGCCTGGCATTACTACTTACGAAGGTTATGTTCTTTATT
 ACTCCATCTACTCTTCCATAATTGCATCCCCCQCAACCAGTCCGTGTCAGCCTTCTCCGAATCCACAGGACAATTCTG
 GTCTCCCAGTATGGTGGGCAAAGGTAGGTTTTGGTGTCCAAGCACAGCTCAGCCATTTACTCTCCAGGTCCATGGGCAA
 GTAACCTAACCTCTCCAGGTTCCCTCAGATTCCATCATCTATAAACTGGGGAATATTAGTACATGCTTTATAAGGTTATTG
 TATTAAAGGAAATAACTTGTCTAAGTCTCAATGCACAAAGTCTTCCCCAGAAGACAGACTTGAAAAATATTAACCTTA
 TTTCACTCTCTCCCTGCTGCCATTTCCAATGTGCTGTTGCATGTTTCTAAATGGTATGTGGAAGAAAGCTGATTAGTTT
 CTTTGCTAATTATTAATTGAATTCCTTTAGTTAATACAATGTATTCTTTTGAGAAGCTCAGCTCAATTTATAGTGCTAG
 AAACATACAAAATACAGAATTTATACGAGTTGATCTGGGGTTCACATAGATGAAAGGGTGTTCCTAGCACATTTGCTCT
 GAGAATACTGTAACTCTTACTTCATGTATATTCTATGTATATACATATGTATATATCTATATATGCTCTGCATCTACAT
 ATGAATATATGTATATCAACTGTTCTTATTTAGTATAGTTCTCCCTGAAAAAGAGGTAAGTACTATTTTATTTTAAATATT
 GGATCTTATTTTAAATATTGGATCTATCTGTAATAAAGTAGCCAGTTAGGCTGACTACCTGTCTAATGAGTTTCCCGT
 TTAGATGGATTAGTTCCATTTAGTCTGTTCCATAGCCAGATCAGACAGTTTCACTAACAAATACACTTAAATTCACATC
 ACTTTGGTCCAGAGGGGTAACTAAGGCCCAAACCTGCTTCTGGTGAAAGTGACCCAGAGGTACGCTTTGCTGATAATA
 TCAGGAGCATGGTCTTTGTAATTGGAAGACACTGTCTCCCATCTCCCATTTGTTATTGCAAGAAAATTAGATTCTCAT
 TGAAATAACAGGCCCAAGAATTATAGTAACAGGAGTTTGAACCCCTGTTTGAGAATGTTGGTACTCCTGGGATAAAATGA
 GATCAATTTTAGCCTATAATAACGGTGCTTTCTACACTTTTATAGATGTTAGAGAAAGTCTGGCAGCAAAGCAAAGCTTT
 GTATATACCATGGGAGGCAGGGTTGGAGAATAAAAGAAAGAGAGACTTAAGAACAAAATTGTGTTTGATGGGATGT
 TTTGATTTTCTTTAAATACTTTAAGTCTCTAGAAATAACAAATTTATTATCTGAAATACAAATAAGAAATACTTATATT
 TGGAAAGTTGATAAACTCAATTATTGTGTAATAATGTTCAAAATTTCCAATGGATAGAAAAAATAAACTTTTGCATT
 GCCAATTATTGAATACTTATTTTACCTTTGGAAATAGCAAGTCAGTTACAAATTTTATAAATCTATATAATTGTCCTT
 ATACATAATAAAATATTCTGATGTTTTGTCTAGCCAATATGCAGTTTAAAGCACCTTCAACCCCTGTTACATGTTTACGG
 GTTTGGAAGTTACTGGGGAGGAGGTAGAAAGGTCTGACCTTCTCCCCAGGAATTTAATATCTGGTCAGAGAGAAAGAAA
 CAGACTTTTGTGTTGTTTGTGTTGGTCTTATAAACAGTGCCAAAATGAATGTGTGTATGTGTGTGTATGTTTGTGTGCA
 CTTGAGCAATCATTTTTGTAGGATAAACTCTTACAAATGTAATTGTTCTGAAATGGTATGTATGGTTTACATTTTAA
 AATTTGCTAAATGTACTCCAAAATGTCTCTCCTAATCCATGTTTCTAACAACTGTGTATGGGTGTACTGTTTCCCACC
 CCCTCACAATCTGCATATTTTATAGTCTTTTAAAAAATCTTAAACGAATGTGATAGGCAAAATACCTCATTTAGATT
 GATTTATTTTGGTTATCAGTGAGATTGAAGATCTTTTCAAATGGCTTTTGGACTATTTATAGTTTCCCTTCTGTAGTG
 TTATTTGCATCCATGTCCCATTTTCTTCTGGGTTATTGGTCTTACTCTAATTTATAGACTCTCCTTAAAGGCAAATGAT
 ACCAAAACCATACCATGGCTGTTTACAGTCGACCCCTCCAGCTTACGTTGCATTAATAATTGCTTCTTAGAAGCTTATG
 TTATTCATCTCTCTCTCTTCTACACTGCTGTTTTCTTGCTTCCCTAATTTAACATTCTCACCATTGCAGTCAGCAGG
 TTAATGGCAAACATCTGAGGAATCAAGGGAAACAACTATGCATTGAGTACTTGCATGTGCTACATGATTTAATCTATA
 CCTTCTAATGTAATCCTGAAGAAATCTAGGAGATATGTATCATTTGTTTTCCAGACGAAAAAATTAAGATTGGTTAAGG
 TTGGGAAATGAGACTAAGTAAATAAAGTGGTAATAAGAGACTCAGGTCTGTCCGATGATACTAAAGCCTGTGCTCCTT
 CCAGAAAACCACGCTTTCTTCAGAAAACTGTTTTTACAAGACTGTATTCAAACATATGGCATGTCTTGATATACATCT
 AAGTAAATTTTAAATATATCTATATTCTTAACTGTCCAATAAAATGTGTATTTATCATTTACAACATGATGTTTTG
 AAGTATATATACATTGTAGACTGACTAAATCTAGAAAATTAACATGCATTAACCTCACATGGTTATTTTGTGATGAAA
 CACTTAATATCCACTCTGTAAACATTTTCAAGAATACAACATATTGTTATTGACTAGAATCACCATATTGTACAATAG
 ATTTCTTGAACCTTATTTTCTTATCTAATGAAATTTTGTTCCTTTGATCAATATCACACTTGCACCTCCATTTCCAG
 TTGCCCCAGCCCCCTGGTAATTACCATTCTAATCTCTAGTTCATGAGCTCAACTGTTTTAAATTTCCCATATGAATGAG
 ATCATGCAGGATTTATCTGGATATATACCTAGTAGTGGGATTGCTGGATCATATGGTAGTTCTATTTTAAATATTCAA
 AGAACCTCCATACTATTTTTTATAATGGCTGTACTAATTTACATTCCCATCAACAGTGTAAGGGTCTCTTTTCTCC
 ACATTCTTGCCAACACTTAATATCTTTTGACTTTCTGATAATAAGCATTCTAACAAGTATGAAGTATAGCTCATTGTA
 GTATTAGTATGCATTTTCTGATGATTAGTGTGGAATAGTTTTCATATGCTGTTGGCCATTGTGAAGTCTTTTG
 AAAAATGTCTTTTATGTTCTTTGCCCATTTTTCAATAAGGTATTTTCTTGCCATTGAGTTGTTTGTGATTTCTTATAT
 TTTTGGATACAAATCCTTATTAGAGGTATAGCTTTGTAAATATTTTCTCCTAATCTGTAGGCTGTCTCTTCACTCAGTT
 GATTATTTCTTTGTTGTGTCAGAAGCTTTTGTAGCTTGATGCAATCTTGTCTATTTTGGCTTTTGTGCTTTTGGTTTTG
 GAGTCATGTTCAAAAAATCATTTGCCCTAAATCAGTGTATATAGCTTTTCCCCTATTCTTACATTTATGTCTTTTATCCA
 CTATAGGTTGATTTTATATATATGGTATGAGATAAAGGTTTATATTTATCTTCTGCATGTGGATATACAGTTTTCCAG
 CACCATTTATTGAAGAGATTGTGTTTCCCCAATGTATGTTCTTGGCACCTTTGTGAAAAAAGTTTCACTGTAGATGTA
 GGGGTTTATTTCTGGCTCTCTATTATGTTTTCATTGGTCTATATGTCTGTTTTTATGTAAGTACGATGCTGTTTTGGTTA
 CTACAACTTTGTTGTGTATTTTGAAGTCAGGTAATGTGATGCCCTTTGGCATTGTTCTTTTGTCTCAAGGTTGAGTTGGA
 TATTTAATGTCTTTTGTGGTTCCATATGAAATTTAGTATTGTTTTTCTGTTTCTGTGAAGAAATGGTATTGGAATTTT
 GATAGGGCTTATAATGAATCTGTAGATTGTTTTGTAGATTGTTTTCAGATATGGACATTTAATATTAAATCCTCCAATC
 TATGAACACGAACATCTTTGCATTCTTTGTGTCTCTTTAATGTTATACAGCTTTGTAACATTTATAAATGGGATTT
 TAAAAATTTCTTTTTCAGATAGTTGCTGCTAGTGTATATCAACACTACTGATTTTTGTATGTTGATTTTGTATACTGC
 AATTTCTATTATAATGAATAGAAGTGGCAAGAGTGGCCATCTTTTCTTGCTCTGGATCTTAAAGGAAAAGCTTTCAACT
 TTTCTTTGTTAAGTATGGTGTAACTATGTGTTTGTCTATATGGCCTTTGCTTGTGAGTACATTTCTTCTATACTT
 AATTTGTTGAGGGGTTTTTATTATGAAAGGATGTTCAATTTTGTCAAGTGTCTTTTCTGCGTCTATTGAAATGATGATA
 TAGTTTTCTGCTCTTTGTTCTGTTAATGTGATATATTACATGTATTGATTTGTGTGTGTTGAGCCATCCTTGCATCCCTA
 GGATGAATCCCCTTGATCATGGTGAACAGTCTTTTTATTGTGTTTTTAAATTCAGTTGGCTAGTTTGTGAGGATTTT

223/375

TGCATCTATATTCATCAGAACTTTGGCCTGTAGTTTTCTTTTTTGTAGTGTCTTCTCTGGCTTTGGTATCAGGGCA
ATGCTAGATTTCGTAATAATGAGTTTGAAGTATTCACCCCACTCAAGTTTTTGAAAGAGTTTGAGGAAAATTGATATTAG
TTATTTCTTTTAGAAAATTTCTATTAACTAGCAGTACAAGTTAGCTAGTTTTACACTTGGGGCTCTGAGGAGATGTAAT
GGAGAAAGAGCTGAAATTTGGGGTTGAGATTTATAAATCTCAAGTTTTGGTTGAGCACGAAAGGAGAGGGAGTGAGACTA
ATGATAAGAAGGTTAAAGTAATCACTGGATTGATTTGGGATGGGCAGTCTCAAAAGTGCTGAGGATTCAAGTTCTCTATTT
CAGTGAGCTGGAACACACAAACATAGAGGAAAAAGAAAGACAGTTCAAGTATAAATTTGAATATACCTAAATGTGTGTA
AATTACGGAAGAAACAACCTTCAAAAGAAAAATAACAACAATGACATGGGCTACAGAACAGTTAAGATTAATGATCCCTCA
TTATAGGGTGCCATTAGACATAGGAGTTAAAAAAGCAAAACCAGAACACACACTGCAGCAGCTCCCCAGTT
GCAAGCACACTGAAATAACAGAGGCCTGCCCTCACGGGAAGAGGATTAGTTCTACTGTGACCTGTTTATATAAAACAA
TGTTGTGGGTAGCAAGATTACTAGAAATGACTTCTTGGATTATAAAGGACAATTATGATAGCTTAGGCCACTAGCTTTC
AGTACATTCCATCTGGTACGTTACAAATTAGCTCATTATTCTGCTGTTCTTACGAATGTGTTAGTCTGCAACATATCA
TTGTCACAAATTAGTCACCTAGTGTCTCTGAAAGTGATTTAATATAAGCACACCCACATCATAGGATGGAACAGTAA
AATGGGTCTTGTAGATCCTCCAAACAGAAATTCAGCATAAAGCAAAATTCAAATTTCCAAAGGTTTTTGGCACATACAT
CATCTTCTGATTTTTCTAAGATGAAATGTGATTGTTGCCCTGGATATTGGTAATACATTGTAATATTAGAAACCTCTTGG
GTCTCCCCATGAACCTCTAGAGATCCAGCCTACTGAGAAATGATGGGTCCACAAATTGAGCATAGCTTTTATTTGTTTT
TATTTACATTTGTTATCGCAGGTGCTATCACAACTGTTGTTTCAATAATAGCAATTTCAATTTGAAAATTAACCTAAAG
ATCTTATTTTGAAGTGTGTTTTGTAGCAGATGAGCTCACCACCCAGCTACTTGGAAAGAAGAAGAAAAGTGAGGAAACA
TAACTTCTCTGCTGTCTAACTGGATTACCTACTGAGACATCCCCCTTGTGTGGGTTATAATAAATATTATTTGTGTAAC
TTCTTAAGTTAAGATGCCTTTGGTTGCAAGTTGAGCCCCCACTTAATGGCTTAACAAAAACAATGAGGAAATGT
ACTGTCTTATAACATGAATTTTCAAGGTAGGCTATTCCAGGGTAGGTTATTAAGAGGTTCAAACACATCACCCAGGTTT
TGCTTTGCCATCTTAGCACTTTGTCTTTTGTCTCAGACTTACTCTCTCATTTACACAGGATGGACAGTCATAGCCAGA
CACCAGGACCAAGGCAGAAAAATGCACCCCTTCATGCCTGAGCAAGAACTTGTGAAGATATATTTTAAAGAGAGAGAGA
ACTGAGTAGTGCCGTGAGTCCAAACCTACCTCTCTTAAAGCGGGCTGCAGTTATCTAACTCACATTAAGCTCAAAGAG
AGACCTGGCCTTCAGCCATTTGATGTCTTCCCAAGAGGACCATCTGGGAAAGCCAGTTTGGCTCCAAGAGCAAGAGTT
GGTAGGGATGGAACCACTAGAAAACCAAGGCCTTGATGGGGGTGCTGGTTAATCAGCAGCAATTGGAACAACAGGCTCT
TGCTTGAGTCAAAGGAGTTGCAGCCAGAGGACCAGCAGGGATACCAATTATGAACCCACAAAAGTACCATGAGACAAA
GAGGCAGCTTTCAACATCTGCCAGGTCTCCAACATGTGATGCCATCTTACGATGGCACTAATTGAGGAAAACAAAACA
AACTCTTTTCTTCTTCTCCTCACCCTTTCTGTGCCCTTCCAATCCCAGAGGAGTCAATACCAACGGCTAGCCAGCCTGG
ATAGCCAAGGAAGGGGAAGAGCAACCCAGTCTCAATGCCACCCACTTACTCCACTGCACACAGAGACTCTGTGGTGGGC
CCAGCTGGGAGAGGGGAGAAAAATGTAAGTTCAATCAAGTTTAGAGTTTTGGGTTACAATTTGAAATGGACATTCTAATT
TCTGGATAGAGTCTGAGATGATGGTTTAGCATGAATGCAAAGGTCTCTATTGCCCTAACAGTACCAGAAAAGTCATAAG
ATGTTCTTTATAAATAAAGTTTAAAGGGACAGTTTGAAAGCAAATAAAATGTGTTTTACACTTTGGGAGACCAAGGTGG
GCGGATCACCTGAGGTGAGGAGTTCAAGACCAGCCTAGCCAAACATGGTGAAACTCCATCTCTACTAAAAATAAAAAA
AATAAATAAATAAATAAATAAATAGCTGGGTGTGGTGGTGGTGGCTGTAATCCCAGCTCTTTGGGAGGCTAAGGTAGCAGA
ATCACTCAAACCTGGGAGGCAGAGGTTGCAGTGAGGCCAAGATTGCGCCATTGCACTCCAGCCTGGGCAACAAGAGCTCA
AAAAAAGAAAGAAAGCAAAAAACAGCATTGTGCTATCTACTACATGTCTCTCATTTTCAGCAAATATGTTACAATA
TTGATATCCATTACAAATATTTTTAACTACCTTGACAATACCATATCATATTTGTATCTTTCTTGCCTGCTTCCCCTT
TCTTACTCTAATATTTGAGGGGAAAAATATTTATGCCTCCTAGCAAATATGCTTCTGATCTTTAAACACCTCTGCTCC
AGCAAATGGATCCCAAAAGAGATGTGCATTCAAGGTGTGGAACACAGCAGGTCACTGGGGGGAATGGGAAAGTTAGGAT
TTTTATTTTTTATATTGCTAGAGACAGGGTTTCATTTTGTCAACCCACTGCAGCCTTGAACCTCTGGGCTCAAAGGATCC
TCTTGCTCAGCCTTGCAAAGCACCGGGATTACATGTGTGAGCCACTGCAGCTGGCTGAAAATTAGTATTAATAGTAATG
TCCTTCTGTCTAGTCCACTGTTTCACCTTCTCTTTTCTTTCACGGCTTCTCTCTTTAGACTCCCTTGGACTGGGAGTTT
AGCACTATCACCTGCACACTAGACCTGCAGTCTATGAAGAGAGGCTGTGAGGGATTTGGGGCTATCACAGTTGCTCCTC
CCAGAGCAAAAAATATTCACCCCTCCACACACACAGGCAGCAGCCTCATCTCAAATGGACTGTGCCTCTAATCAGTGA
GTGTTATGGAAGACGAGGAGAAAAGTGCAATTTATATTTTCATTAACCTTGTTCCTGCTTCTCTGTAGCATTTTCATTTT
GAAAATGAGTTGGGAATTTCAAACATCAATAAAACGTGCTGAGGATTCTGACAACAAAATCCTTTTTTGTGCTGTGCTA
TGTTGCCCACTTCTGCTTTTTATTTTTGCTCCAGTCCCTGTTTGTGATTGCTAATCTAAAGGGAAGGGAGGGTCAAGTGA
GAAAAGAGGAGAAATCTTAAATGAATTTACTATTTGATCAGGTTTGTACTTTATTTTGTGGAATAATTTTAAAGCTC
TTTTGTGCTCTTATGTATTTTACAAATCTTGAACATAAAACAACAGATAAAATCACATTATATTTCCCATTTGAATTAT
TTCCACATTTCAAATGTGCTTCCCAGAGAGAAAAGTATAAGATACAGAGCTAGGCAATTCAGTTTTACATTAATAGTT
TTGTGCTCATCAGTTTGGGACGTGTATTGTTCTATGTTTTGCTTTGTTGTGCTTATTAAGTGATTTATATAGTCTATTG
CGATTTTTTTTAGGAATGGAATATGCCAATTATAGAGAGAGGTAGGCGAGTTAAAAGTTTCAAGTGCTCAGCATTATAGA
TTCACCCCTCGAGTCAGAATGTTAAAAACAGCAAGGAAGAGTGTGTAATAAGTGTAGGTGAATGAGAGGGCATCTGTCCAC
AATGGGCAACTAGTATTTAATAACTAGCCTTGAATTTATTCTACACTTGAATGCAAAGATTATTCTACTTAATTATACT
ACAGTGACTTTGAACTATTAATTATTCTAAATATTGGGTTCTAGTTTAAATACATTTTTATATTTTTAAGCTTTCAA
ATGATTATTTGAAAAATTTATCTGAATATCCTTTTTTTTCTTAAAGGAATTCTGCCTTTTGGAGTACTAAATTATTCT
CTCTATAAATCTAAAAATATCACAGTATTTCTTTTTTTTCCAAATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
CTCCTTATCTGAAACAACTGACATTTAATGAAGAAAAGTGTGAAAAGGGGTTCCAGAAAATGAGAAGCTAGTATTTTG
ATTGGAAGTGTAATAGATGTGAGTCAGAGAGAAAAGAACAGTCTCCAGAACATCTAGATGTGGATGTAGATGTAGATACA
TTGTTAACGCCACTCTGTGCATTTAATTTAAGCCACTTGATCATGTAACCATTAAATGTCAAGTTCATTCATTG

224/375

[illegible]

225/375

GTGGAATCATGAAAAGTCCCAACAAAGCATTGCTGGTTTTAGGTGATGAACTAGGTGTTAATGAATTTATTTTTTC
TTTTCTAATTGGTGATTGTACCCTGGGTTATGAGAATATGTAGAAATTGAATGTAGTAGCTACTAGCAACTTGCTGAAA
CATGATGCATTTCCCTGACTCTCAGCAACTGAACTGCGGCTTCATGAAAGGCTTCTCGTATTTTCAGTTATAAATGTTT
AGAACAGCATGCCCTTCAGACTTTGCTAGAACTTGCCAGGAGTGGAAGTCATGACTATCAACATCGTTATTAGTTAACA
TTGACTGAGTACCAACAATGTTTTTGGTGTTATAAATATAGAGAAGAAGACACTGTTCTGTTTCTGGGGGATTGGCTTT
CTGTAAAGGTGAGATAGAGAATTTGGTCTTGAATGTTCTTTTCTTGCTGGGAGGTGGGGTTGGAAGCACAGCCACCTCA
GGTCTCATTCTGATGGCACACTCACCTCTTTATTAGTTGATGATATATGCAATAAAAAAGAAAAAATGTATAATTACAC
ATACATACACACATGTGAAAACCTCATGTAAATTTTATTTTTTATTGGTAAAAAATATATATTTATGGGGGGAGCTTGAG
GCAAAAAGTCACATCCTGCAAGATATCCAGGTGACAGTAGCTTCTATATCCTTGTGTATAATGTATTTATACTGTTATT
AATAGTATATAGAATGTGCTAAGAAAAGTACATAGAAGTTTTTGTATGTGTAAATATATTTATATGAACCCAAATATGTA
GAATACAGGGACCAAGTGTTTTTGGTTTTGACATCTAAGGGACAAAAGTAATCCAGCCTCTTGAAAGAATGGAGACTTTT
CAAAAATATCTGAAGTATTATTGGTATTATATAAGATAAATAAGTCATCTTTTAGGTCTTTATCTTTGATGCTTAA
ATATACAGGAGTTTTATTTTCATCAAGTTATTTAAGAGGCAAAACATTGACATTAGCTATTGATTATACCAAAATGCAATG
ATGACAAAAAATATACCTTAACATTTGACATTAAAGTTACTTTCTGAAAGTGAAACTCAGGGAAAAATCAATGAAGTAA
CTCATCACACCTCTGATAAGTACAAGTGACTAAAGAGTCTAGGAAATACCCAACCTCAGGAACTAGGGTGTGACTTTA
TTATACTATGCTTATACTAGCATAAAGGTTGAACCTTAATCATCTTTTATGCTCATTGTGAAGGAAGTGTGTAAGTTGA
AGGCATTTTAAGAGGATGAAATACTGAAACTGATATTACAGAGATAAGAATTTGTGTAGAAAGTATTAATTCTGTATTT
CTACTGTTACATTTTGTAAATTTTTTAAAGAGCCAGACTTTTTTGTATGTATTATCAAACCTTGAGATAAAACTAG
TTAAAGCAGAAGAGCTCTTGTTGAAACAGCACAAAGTACCTGGCTTCCTAGACCCAGCACAAAGTACCTTGCCCCCTCAG
TACCTGATGCAACTTTGAAAAACCATAGGGTTCCCGAGAACTTAGTTTGAAACCTTCACTCTTATGAGCATAACCC
TATAACCATGAGAGAAAAGGGTTTTATTGGAAAAGGACGTGGGACACCGGCTAGTTAAATACCTTCTGGCTCTGATTCTGG
ATGCATTAAGCGATCTTCAATGAAAATGTTGAAAGTATTTTGGTTTGTCTCTGAGTTTGTAGTTTATCAATTAATTGAG
CTTTTTTATTGAATCAGCCTCATTTAAGGGTAGTTAATATAAGTTCACTTACTCTTGTGCTTGTGCTGTTGGGATTAAATTT
AAAAAAAACACAAAACAAAACAAACCAGTCTTTGCTCTAGTAGAGCTGAGGTTATGCCATAGCTGCAGGGACTTC
ACTGAGGTTATGCCAATTTGTGGTGCCCTGCTAATAATTGCACTCCTGTATTGATAAAAAATAATGGGGCTGAGATTAG
CCATAAAGATAATCTTTTATGGTTACTCCTGATATTTCTTTTTAATTTTTTTAGAGACAGAGTCTATGTTTCCCAGCCT
GGCTCTGAAATGGGCTCAAGTTATCCTCCTGCATCAGCCTTCCAAGTAGCTAGGACTACAGGCATGAGCAACCAGAACT
GGCTTCCCTGATATTTCTTAAAGTTTCATGAAAGGATGATTATCTTTTAGTGTAACAAAATAGATTAGCATACCTACCTAA
CCCAACAACATTTTTTCAATTTTGACAACCTGTTTTTAGATTACAAACCTATTAGTTCTGCCTAACTGTTGTTTTCTTGA
AGGCCATACATGTAGGAAGTATTAATTTGTAAAGTATCAGCCTTATAAATTAGTAGACATAACTCTTAAGACCTCTTT
CTAATATAAATGGAATAAAATGCTGGAAATGAGTTATTTCTATTTTTCTAAGCAAGCCTATTCTTTTATATTTGTGCTT
TATGCTGCAAAAATATTCAATTTTGGATTGTTTAAATATGTGTAGTCTTGATTCTCTGAACTGTGAAATAAATTACAG
TTTTTCTTTGCTATCTTTCAAGCAGAAATTTGGCTTTTCTGTTATTTATCATAGTTTCTCAGTTGTGTTTCTTTTGT
TCTAATTTGTAGACTTTATTCTAGACAGTTGCATGTATAAAAATAAAAATCCAACGAAAATTCACCTTAAAAATATTC
AGCTAAAATGCTCCTCTTAGTTTAAAGTATATTTAGTAGTTTAAATGGCCAAATCATTTGTATTTTATTTATAAAGTGCTTT
GCTTATATCATTTGCCGCAATGGAATGTAGCTAACAAGTATTGAATGTTGAACTGTGTGGTAGTGGAGAAAAGATTC
GAGGTATTCTTACTATCCTATCACCCATAGGTGATGGTTTGACATATGAACAGAGTAGAATAAAATGGACTAAGAAAAAT
AATGTCAGATAAATGATGTTCAATTACAAAGGAAAATATATTTTACATCTTTTAAAAAATCTTTGCATTTGCTACTTT
CTATGGAGACCTACTCTCTGTATAAGGACTGAATGTTAGTTTAAAAATAATTAACCCATCATTATCATCATCATGA
TCAAAGATCACTAACAGAGTCAAATAATTTGAATTTCTTCCAGATCTACTGCTCACAAGATGCCTGATAATGAACAA
ATACAATCTTTTTGGCATCTCCAAATGGGCATAATAAATGTCTTAATCTCCTCAGCATAATTCTGTGATGCCAAAATA
ATACATATAACAATAATATTTTAGAAAAGTATAAAAGTATAACAAGGTGGTATTATTATGATTACAGAGGTGCTAGAATA
TTGTGGTAATGTGTACAGGCTCTGGAGCCAGACTTCCTTGATTGAGATAGTACTACTAGATATTAACTCAGACAT
GCTACTTAACATCTGAGTGCCTCAATAGCCTCATCTGGAGAACAGGGCTAGTAACAGTCCCTTAACCTAGTGTGCTGTTG
TGTGGATTAAATGGGGTAATACTGTAATCTTAGAATGGGACCTGGGGCATTTGATGTTTCTAGCTCTTAAATAA
TAATATTTAAATGTCTAATATAATATCAAATTTTAAATTAATGATTCATTCAAAAACATTCAAAGCTTGTAAAAACAATGTA
GGCTGAAGTTTTCTGGGCCAGATTACAAATGACCTTATGGAAGAGATTTAGTCCCTTTAGCAAAAAGGGTTCATGAGGA
CACTGCCTAGGCTACAGGAAATCTCAACAAATTTCTCAAGATTCTTTTATGCTGTAGTGGCATCTTTCTGAACCTACA
AGTTCACATTTGGCTTTTAAAGGAATCACCCAGTTCTTCTTCCCTCCTAGGAATCCTCCTTTTAGGATCATCTTTTGTACAA
AATGAAAAATCTCCAAATTTATGGTGGTTTTTAAAGATTAGTTTTCTTTTATACTAGGTTTTGAATTTATGGGACATGCCCT
CCACCAATCTTGGGTAATATTTTCTGCAATGACAGGACCTCACTGGGGAAATCCTAAATGAAGATAATAGCATGTTAT
ATTAAATGTTGCCGGTATTCCATTTAATATCAAGCAATTGCGTAAAGCCTTTTTAAATACCTAAGTTAAAAGTGGTAT
ATTAAATGTTGAGTGTACTTCTACTGCAAGTCCATTCTCCCACTGATTTCAAACAAATACCATTTAAGTGCCAACCTAC
TATTACAAGAGTTTACTATTTTATCTTGTCTCCAAATGGCATCAACAGTGTAGGGGTGCTTTTGGGGGATTATTGAAC
AGAATTTTTGCAACAAAGGAGCAAGCATGAAGAAATGCAAAACATCAGTGATAGGGATTGCAACGTTTTATCTCAGCAT
TCCTCATATCTACACACCCCTAATCAAACAAGCAGTTTTATGGCATGCGCAATTGCAATTGAAGTACAACCTGACTTCT
GCAGAACCGGCTTCCATAGGATTTCTGTCCAAAATCACCATGTGGTCACTGTCAGCTAAATGGTTACAAATCATCA
GTAAACAAGGCTTCCCCACCCGGTGCTTTTTTTTTTAAGGAGTGAAATCCACCAAACTCTATCATTTGCAAAATATCTC
TGGACTTCTTTTATTTCTTTTTTTTTTCACTGGGTAAGAAGGAAAACGAGCAACAAAAATCCTCCCTCCGATTTTGT
TAAGGCGTAATTTCCCTGTGAGGTGTTTTACAGGCTTCTCCTTGTTTAGCTTTTCTTGCTGGTAATTACTGAAAGAAG

226/375

TCTGCTCTTCCAGGGCGAGCTATTCCCTTTAACCCTTTTGTCTGCTCTTACTTGGAGGTTAGCAAGGAGTGCGCGGCTC
TGCAATGTCTGGGAACCCACCTAGAGGGCCCCCTTGACGCCAGCACATCCCCTGTCAGGCAGCAGTCTCTGCAGCTGAG
CCAGGCTGCTGCAGAGTTAATGTACAGTACCACGGAGCCTGCAAGTGTCTGAGCTGATCAGAGCTGGGGCGGCACAGC
CCAGGGCAGACAAGGCGGCTGCGAGGATTCCAAAGGTTCTGCTGGAAATTCGGCGCTGGGGGACTCCAGCAGGAGCCTG
TTGCCATTGTGTTTTAAAGCATGCAAGGTTCTGTATAGCTTTGGGCATGAGAATCTTTCAGAAGATGTCAGAGCATCAGA
ATAAATGACACCTATTGGAAAACCTGAATTTGGGGTGAAAAACAAAAGAGATTGAGAGAGGAAAAAAGAAAAGAAAGA
CATCGGGGAAGAATTCTTAGACAACGCTGACTTGCAGCTGTGAAATTCATTTTCTTCCAAGGCAAAATATGAAAAG
CTCCACATGGTTTTGATAATAACAAAATAAAGGGGATTCTGCAGTGAAAAGATCAATAGCTTAGTCATTTTACTTAAA
GAGAACAGCCAGCCTTATTATGGGGTTAGGCAGCAGAAATGAATTTTCATCGTGACAGCATCTTCTGAAGTCATGATGGT
AGTTAATGGTAATCTTGTCTGCAGAGCAGAAATTACTCATTGCCCTTCTACTTTTGCAGTTGAACAGCAATCTTGAA
ATCTGGGAAAGAAGTTGGCTTTGGTGATACATGGTTTCTAGCCCCCTGCCCCAGGCCCTTTGTCCGACAGCTCTCAGACG
GTAGCACTGCGTTAAAGTGACCATAACATGATATGTGCCAAGAAAGCAATATTTCATTTCTAAAGGACAG
CATGGCAAAGCAACCTGAAGTTTTCCATTTCCCTTCTAACACTCTTTTAAACAAGGATATCAAGAACTGTCTTTTGACT
CCTTTCTTCCCACATTCCAGAGTCCCTTCCCTTAAGGATGCAATTAATTTTACACTCAAGGCGGTTAGATTTTACCAGGACAA
TATTTGCCACCATTTAGGATTATTAGTTGAACCTGGTTATTTTAGTATGTTGACTAAGTAGTGAACCTAAATGGATGGA
CCCATCTGCAGTGCTCTGTGATGTTTTCTTTTTTCAAATCTGGAAGGCCCTTTTGTAAATGCTATTTGTTTTTATTGG
TGGGGGAGATTTTTTTTTTTTTTTTTTGGGATTCAATACTTGTGTGCAATAATTGCCACGATAGCTGCTCAAACAAGA
GAGTTGGAATTCATCTGTAAAAATCACTACATGTAACGTAGGAGACAAGAAAAATATTAATGACAGAAGATCTGCGAAC
ATGATGCACGTGAATAATTTTCCCTTTAGAAGGCATTCTGGATATGGTGAGTAATCAATATTTCCCTTCAGTTTGTAAA
ACTCAGAATTATCAAATTCGGTGACAGGTACCAGATGAGGATTTGTCTTGAAGTAGAGTATTGGTATCAAGTGAGAATG
AAAAGTAACTGTGCAAAACCGAATATTGTCTGAGAAAGTAATGGTTATGCAATAAAAAATACTTTGTTAATATGAAGCA
TCCCCAAATAAGTCAAGCATGAGGACTTGAGAACATTTAAATTGCTAATATTTTCATGGAGGAAGAAAAAACTTTGAGA
ATGGCAACAATTTAATAAATTTTTTAAAGATGAGGCTTAGGGTTTGTTTTTTGTGTTTTGCTATTTTTATTGAAAA
TTCCCTGGGGAAGGGCACACATGAATTTCTGATATATCAATTTGTCTGAATTTCTAAAAGAAGGTTAAGGGAACTTAG
AATGTTGACTCAATTTTAAATAATGCTAAAATGTGTTGGTGCCTCACAGTTAAGGATATTTTAGCTATTCAAGAAATA
TTTCTACCAGAATGAACCAGTAGAATTTCTAGTAGAATTTCTAACATATGAATCAGGAAGTGCTCAGGCTCTCATAGAAT
TGCTTAGTGCTTGTATTTGGTTCATCTATTAAGGTTCAATGCAATGCATTGAGGTCCTGGACATGTGATATCATGTG
CCATTTCTTGCTGGAGTTTATGACTAAATGTGTGTAGGAACCTATTGCTGAGGATTTTATAAGAGCAAAAGGTCATTA
TTTTAAATTTGCTTGTTTTTTGGCATACTTTAGGGTCAGCTGGATTCTGACTTTTCATAGCAGAACTTTGTGAATGCAT
AATAAAGGCACATGTTAAGGCTTAGTGTCTGCTAACATGGGTTGTTTTGGAAATGCAGTTTGTCTGATTTTGAAAGTAT
ATCTTTTCAGGTAAATGTTCTGGCTGGACTCTGGATGAATAATAGATACCTAAATATAGGTTTCGGAGGGCTTTCCAGCT
GCTTTTATGACAAATGTCTCAAATGAAAGCTCCCTGAGAGCTTAAGGTACCACCAAATCACCTGCTGGTTTGTACAGA
GTTTTCGGCTTTCAGCTAAAAATCCATTGCAGAGAAGGATGGGAGGCATCTCTCCACTCTAGGCAGGTGCTTATTT
TCTAACAAACACCAGATCCATCCAGAGTCGATGCTGTGGCGTATCTACCTTTTTTGTGCTGACCAGAGCTACTATCCCCAGT
CTCTAGAATGCTTGGGTGACATGCCTGCAAACCTCGGTGGCCACTTCCAAGTGCATCACCAGAGTTTCTAGTCAGGG
GGAGCCTTGGTGCCATTGCCTTGTCTGTGTTGGTGAGGGTCAGGCATCAGCAATAAGGTCCTCATTATTTCTACAG
ACAAATTTACATCAATAGTCTTTAATCTTGAGATTAAAGATCCTGGAAACAGTTTCTGGCACGTAGTAGGCATTTGTC
AATTATTTTTCTTCTATGCCTTAGGCTTTTCTTCAGAGTTTCATTTTATACCTCTTAAGATTTGCTTGGGAGGGGAAAT
ACCAGTCTCCTTTCTATCAAGTGTACCTTGCTACAAAGCAACAGTTTTTGTCTACCTAAGTTCTGCTGTTTAAAGCCCA
TTTGTATTATGTTGTAATACATAGGATCCATGTACTCTTTGAATGCCTGCAATTATAAGCACTTTTTATTTTTATTGCAT
TAGCCTCACCTATACTTTTGAAGTGGAAAGAAATAAGCTATTCAACTCTGAAGTTTGGAAAGAATGCAATTTGCTTAT
TCATGCTCCTCTAGATCTGTAATACATATGTTTGAAGCTGTATGGAGAAGTTGAGAGTCTGTTGGTTTTCTTTGTG
CCTGGAGTTAGGTAACCTTTCATCTGCTTCACTGCATGTGTAACCAATCTGTTGTTGTTGTTGTTGGCCAACTAAGCCA
ATGTAGAATGTTAATGCTCTGTATAACTCTTCTTGGGCCCCCTTGCAGGGATTCATTAATTTGATGATGTGAGATC
AAAGGAAGAAGGTGGTGGTTTTTTTCCAGGTGACCTAATTAATTTGTGCTTGGTTCTTGACTTTCTCAATGGTTGTTG
TTTTCTCTTATTTATAGCCTCCCCCTTCCAGTACCTGAAGATTGTTAGGGGTTTGTGACAGAAAAACCTCTTTT
CCTTTGTCTTACTGTAAGAGCCCCCTATAGGGTGAGATTTTCCAGGCTCGTGAATTTATCGTGCTTAGAATAAAGGTCTCGCC
AAATTGCTCTTTTTCATCTCCAAAGACTCCCCCTATCCTCATTCTCACATTTAGAGCCTTTTCTTCTGTAAGGGACCGAT
CAGAAGTTGGCAACAGGCCAGTGCTAAGGAATAATAACATTGTAAGAGCATATGTGCTTTGGTTTCACGAGCCCTAG
CTCATCTCTAGAAAGGCTCTGTACCTTTGGAGAGGCGGGACTTGGCATGTGCTGGTCTCTTCTGTCTGCTTTTTG
AGAAGCAAGAATGAGAAAAAGCTGAGACACAGGAGGTCTAGGGTAGTCTTCAAATTTTACCAGAAGTAGTAATTGAAAT
AGAAGCCTGTGCACAGAGTTCTTACTTGTACTCTCATCCACCTGCCCTAGGGCTGGTGTGTTGATTATTGAGCAATAGT
ATTACAAATTTCACTCTTTATCAGTTATGAGTTAAAGTTAATAAGTGGTCCATTACTTGGTTTAAATAGAACACTACCCC
TTCCGTGCTAAAAGAGTGGTATGAAGAATGTGTGTTTCTTCTTTGAAGCTACATTAGAAATATTAGCTGGAGGATTTTA
TTGCGAAGGCTTCTTTCCATTACACTTTTCAGTCTTTTTTACTGCCAAGCCAAACAAAGATAAGGGTTTGCCTCACTGGA
TAGATAAGTACTATATAGCTCTTCTTATTTTTCTTCTGGCTAGTTGTTAGAATGGAGAGATAGCCTGGCATTACAGGAA
CAAGTATGGCATGGTTGAAAGAAGGGAAATGCAAGTCAGCTTTCTAGGAATTTAAATTTTCATGTAGCAGCAGTTAAGAG
GACCTTTAGAAGCATTATGACCTGGAATCACATGCCAGGGTCTAACATGAATGACCTAACACAGTGTGACTAACATGTT
CAGCTTTTTGCTGACTTAAAGATATATAACAACTTTTTATAATCTTATTGTAAAAATACTATAATTTTCATGCCAGA
AACATCAAGGCTATGTTGAATGCAATTAATTCATAGCTAAACAATTTAGGAGGGCATTTTATTTAAATACCTTTTGCA

227/375

TCCTTTTAAATGATGGATTACATGGCTAAAAGGACAGTGGAAGATAGAAGCTAAAGGCCCTGGCTAGGAGAGGCTGTGG
 AATGCTGCCATGGAGGGCCCTCTGAGGACACCAGAGGAAGATTTGGGATTAATGATTGTGGAAGGTGATTAAATGATTT
 GCTTATTTGGTGCTTAGGGTTAATTTTAAAGGTAGGACATCTAAATGTTTAAACTGTCTTTGTGATGCTGAGAGGT
 AACTCCAGTGAAGAGGCAAAATGAGGTGACTGTGGCACTTCACTCAACATGGAGGCATCTTTTCTCTCTCTAGGAC
 CCTAAATCTTTTATTAGACTGTCTTTTCCAGGTATCAATTTCTAAAGGTTTAGTCTAGAAAAGTTATTTGTTTGATT
 GTTCTCTATAGACCAAGCATTCAATTCATAAACTAACTCATACTGTTTTATTCTGTTTTGATCTAAATCCTTTATGGA
 ATGAAGCAAGATATAAATCAGTATATTGATAATATATTCATATATGTGTTTATAATTTGCATGTATATGTGTTTAAATC
 TACTAATATAATGAATACGTATTCAGAGAAAGTCAGAAATGGCCTGCTTCTAATGAAAAGATAATCCTTCCATCTAGC
 CTCATAGAGTTTCATCTTTTAAGGTTTCTCTCTCTCATACTGAAATTACAGAACTCAATCCAGAAAGTGCATTTC
 CAGAGTATGTGTTCTGACCAATACATTATATTTTATTAGAATTTTAGGGGGTGGGAGCAATATTGAGTTTGATGACTAT
 GTATACGTTGAAGGAAATGACGTATCAAGTCTCATGTAAGATAATGGAGCTTGTCTCTTTTAGTTTAACTTCTCTCTCTGGGTAC
 TGCAGTGTCTGCTTGTCTTCCAGTGAAATGTCAGGTAATAGCTGACCTTGTCTTCTTAAACATCTCTCTCTCTGGGTAC
 AGAACAACCCAGAAATCTAAATATAAATACCAGACTGCCAGCTTAATTTCTGAAATTCCTGTTGGGGCCAAATACAATT
 TACTTGTAACACTTAGGACCAATAAAGTTTAGATGGAGCTCATAAATTATACAACTCATCTCGTTCACAAATCCCTAG
 GGCTCAATGTTAAAGTCAGCCATTGTTTAAAGGCAGAAATTCAGGTTTAGATATAGTGTAGCAAGATTTTCCATTATAT
 GAGATATCGATCCTATTAAACATAAACTTTTCTCTTGGCTTTCTATTTTACTGTCTTTTGTGGCCATCAGCTGTATGC
 CCCTTAATTTTTTCTAGTAAATACCTTGGAAATTTAAATGAAATTTACAAATGTTTATGTTTTAGTGTTTTTAAATAA
 TTCGATTAAGTATGCTATGATAGAGGAGCAAAGTTGTTATTAGTAATATCAATGTGCTTACAACCTATGGAAATGAAA
 ATAGTCTTTAGTCTTAGCAGCCTTTCTGTGTAGTAAATAGTTTGTGCACTTTAAATCGCTGTGAGGTTACATCTTCA
 AAGGACTGAGTGGCATAAGCCAGGGAGGTCTTAGAAATCTTACAAAAGGAAAAAATAAGAAATTATTCCTCATCATAT
 GAAATTTATTTACTAACAATGTATGATGTTTTAGCTTCTTTTAAATCTTCACTTTCCACTCCTTTTGTCTTCTCCTT
 TTAGTTGACTATTACTGAGTTACTTACACTAATGTTGAGGTATTTGGGTTTCAAGAAAAATAGGCAAGTAAAGGAAAT
 TGAAATAGTTTCAAATCTGAGATGCAAGAAGAACCCAAAAAATAAACAACAGTTTTTTATTGCCATAGGTGGA
 ATGTTCTTTTTTAAAAAATCCCTCATCCTTTCTCTCTCTTCAATCATATCCCAAAACGTTAATGCTCATTAATA
 CTCTGTCTAGCTATAGCATTATCCACATTTTGTCAATAGCTCAAAAATGTCTCCAAGCCATAACTGCTGCAACTGCTTA
 TAACTTGATGGACTATTAGGTGACGTTTCCAGTTGTTTGAAGAAGTACCAGCCTATAAACATACCCAAAGCAATATATTA
 CAACTAGGGATTATGTTGTGTAATAATTTATACATATATATCTCTCCATATATGATTTCAAGGATAGATAATCTAGAGTC
 TACATAATCAGGCTATTGGCTGGAAACATAAATAAACTAAAAAATAAATTTAAAAAAGCACTCCAGGTTTCTAATT
 CAGCTTCTGGAGTGTAAATGTTTTGTGTGACCTTCTGAAAGCTCTTTGAGTTTTTACCCTTTTGAAGCAATTATACAGC
 AGATATTTACCCACTTCATGTTAAGAAGTAGGCTATTAAAGAAAATCTCATAGCACATTGGTAATAACAATTTATTAGA
 GACCAGCCTGAACAACATAGTGAGACCTGTCTCTCTATTTTTTAAAGGTAGCTGGGCATGGTGGTTCATGCCT
 GTGGTCCCAGTTACTCAGGGAGGCTAAGGTGGGAGTGTCTCTTGAATTGAGAAGTTGAGGCTACGATAAGCCATGATC
 ATGCCACTGCATCCAGCCTGGGCAAGACAGAAAGACCCTGTCTCAAAAAATAAAGAAGAATTTATTAGAATGTTGA
 CAATGACATGCCAAATCTCTTGTATAACTATCATATACTTCATGGAAGAGATCAACACTGTTGAGCACTCCTCTGCAT
 GCCATATGTTTTACATAAGTTACATCCTTTAATGGCAATATAACTTTCTGAGAATTTCTTATCCAAATCCCTGTTTGC
 AGATGAGGAAGGTAATGTTTACAGAGATTAGATAACTTGTCTGAAAGTTTATATATCTATTGCTAGGGAAGCTGACCCAC
 TCAAAACCAGGCCTGGCCTGATTTTAGAGCCCAATATATTTTAAATCCACCATATTGTTCTTGTGGCAGATGACTTAGC
 ACTCTTGTATTATGGATCTTTTGAAGTTAGATTAGCAGTAGACCAGAGAAAAATAAGCAGATTTACCTGTATTATTAGC
 AGCCTGGCTAAGTATGTAGGATGCTTACTGAATGTGAATAGCCTTTCTTGTGAAACTCTTCTTTTAAATGTTAGAACA
 ATGACCTATACTTAGACTGTGTGACAGCTCTTTCTGTATTTTCTCAGAATGAGAAATTTAAAGGAATTTGTGGTGA
 CTCTGTTTCCAAGGTCACTGTGGCCTATAGGATCCTTTCACTAAAAAGTGCCCTCTCTGACGATATATTAGGAAGGTG
 TCACACTTTGAACAGATGAAGTAGAAATGCAAACTACAGTACTTGGTGAATGGACAGAGCCTCTGTTTCAAAGCAAAAGT
 CACTCTTCCCACTGGGTACACACTTGGTGTGTGGAGCATAGATGAATTCAGCTCTATTACCCTCTCTGCGGGGCAATTG
 TTGAGCCCTGTTCAAACCTGCCATCTCTGCCCCCTGCTTTGATAGGGCTCCAGCTTTACTTTGTGACAGATGAATGGT
 TTTGAGAATGCTTTGCCAAAAATAAAGATCATCCACATTTTAGGTTTGTCTCAAGTAAAGAATATTAGTATTATCTGAAATCAGATCCAATT
 TTCAACTAATTGTATGCTTTTAACTTCAATTTTGTGCTCAAGTAAAGAATATTAGTATTATCTGAAATCAGATCCAATT
 GCCAAAGAAGCATTTTAAATCATAAAATAGCCCAATTTCTGAGTTACTGAAAAATGTCATGGTTAGTGAATTATATTGGA
 ACAGGTGGAACACACTGAGTTATTTTATCATAGGGGATGCCAGATGAATGTAATAAGAGTCTGCCCTTGGAGATACTC
 ATAACTAGTCTGGAGAACAGCCACAGAAACAAATAATTACAGTATAGTATGGAGCATATTAATATAGATATATACAAG
 TTGTTACAGGAGTCAAGAAGGAGAAACAACTTAACTGACTTGATCCAAATACCTTAAGTTTCAAAGTGAAATATATTTG
 ATGGATTTGGGAATTAGTAGTTACTGATAATACTTCAGAGAGTGGTTTTAAGGGAGTGTCTGGGGGTAAAGTTATATTTCA
 GGGGTAATAAAGCAGAGAAAAGTTGTGCAAACTACTTCTTTCAAATTTTGTCTTAAAGAACGAAGGAGGAGGAGAAGAA
 GAGGAGGAAAGAGGAGAAGGAGAGGAGAAAAACACAGTAGCTAGTGAAGAACACCAAGCACTTTTAAAGAGTAGGAAGCA
 TGTCCCTAAGGAAATATTCTGATACAGAGCTGGGAAACTTGTGGACATGACACCCTCTGGGATAGGGGGAGGAAAAAGGA
 GGGAGAATGCAGATAATGTGGAGATTAGGTAGGTGGAAGGAGAGCCTGAGGGAGTTTTTGTTTTATGCCCTGTGTTTTT
 TCTGGGAAGTATTAAATGGAATTCAGATCAGATCTCAGAAAGAGGACCAGGGAGGAGCAGGTGGAGGAGCTTAGTAAG
 ATGATGGAACAGCTACTAGGGGGAATTGGAAGGTTATTGAAGAGAGAGTACAAGACAGTCAAACAAGTTGGAAGGAAAGG
 TCAGTGTATGTTGAATGAATATATCCAGTCAATAAAGACGTTTTTACTCTACTTGAGAAATATTTTACACAAAGTATTAT
 GTCAGGGAAATGAGTAGAGATGTGACAGAAATGTTACAATCTTAATTATTAAATTTGAAACTGTTTTGTGATGAGAAT
 GTCTCCTATGGATTGTGTTTCTTGGGATTCCAAAGAATACAGAGTTGATCTTAATTGTTGTTGTTTTATTGTTAG

228/375

[illegible]

229/375

GCCCTGGGAAGGCTGAGAAGTGC GG GTATACTCCATAAACAGATCCCTCCCCAGTACTGACAGTGGTTCGGTGGGTGAG
GGGTATTGGGGAGGGTACAGGGAGTTGCTAGGGGTGGGAAGACCCTAATATATGTATGTCTTACTTGAAGCCTCAGGA
GTACCTGAAGTAAGTGATTTTGTATGGTGTGGTGGCATGTGAATCAAAATGAGCTGTGTGTGTGGCAAAGCAGGTCA
ATGAGCCCAGCCTTTAGGAAATTATCAGAAATTTAGAGGTGAGTTTGGGATTCTTACTGGTCATGAAATTAGGAAGTT
CAAATCAATTTTGTATTAGATCTCAAGGGAGGCAGAGGGCCTTCCATCTTTCAAGAGTTAAGCAGACCATGAAGTCCAAG
GGTATGCAAGATGGAATGTAAAGTTCTCACTAAGCTTCTTAGGATCCAGGGTAAATCAGGAAGCTTTAAACACAAATCCC
CGTGTCCATTGGATAAAACAATTTGATGGATCAGGGAAGCACACCCTTATGATACTAAGATCAGAAAGAAATTTGTCTT
AAGTTGTGCATAAAGATTAATGATATACATATATAAATCATGGTATCTGCTCAACTTAGTGTGTGTTGATATATTTTAGT
TCCTCTCCTGTCCCTTTTTTCCCCTATGGATTTCTGTGGAAAGATTGTAGTATATTTGAAAGTTCTTTGAAATTTGTAAA
TACTATTGTTAGTTTATAATTAAGAAAGAGCGGCCGGCGTGGTGGCTCACGCCCTGTAATCCCAGCACCTTTGGGAGGCC
GAGGCGGGTGGATCACGAGGTGAGGAGATCGAGACCCTCTTGGCTAATATGGTGAAGCCCCGTCTCTACTAAAAATACA
AAAAATTAGCTGGGCGTGGTGGCGGGCGCTGTAGTCCCAGCTACTCGGGATGCTGAGGCAGGAGAATGGCGTGAACCC
GGGAGGCGGAGCTTGCACTGAGCCAGATAGCGCCACTGCAGTCCGGCCTGGGCGAAAGAGCAAGACTCCGTCTCAAAA
ACAAAAACAAAAACAAAAACAAAAACAAAAACAAAAACCTGTGTACCAGATTTCAATTAAAACTGATTAAATACT
ATTAAAGAAAGTATAATAAAATAGATAGTATAAGAAAAGGATAATCCAAATAAAAAATATGTTTTCTTATTAATAAATGG
TATGTCTTGCCAAATTTTGAAGTTAAAAGCACAGCAATTTCTCACTTTCTTTAACCCAACTTATAGCCCATTATAGCACTAG
ATTTTAGAATCCTGAGTCTATGCCATCTGTAATGGCAACAGTCTTACAGGGTGATAACAACCTTTTGTAATTTCTTAAGG
AGACTTGAATTTTGGAGGCAATGTTGAGTCTATACGTGGACATTTGTTGTGTAAAGAGTGGAAGTGGAAGTCAAAATTC
TGACAAGGTTGCTCCCAATAAGATCTGTCAAGTCAAGATTTGCTTCCCTAGGCTTGAATGTTTCAAGCACAAATTC
AATTCAATAAGGAAATGAGAATCATGAAATGATTATGAAATAGCAAGCAGTCTGGAAGAGGATGTAGACGAATGCCA
AAGCTTCTGGAATTTATGAAATATTTCCATTTATGGGGCCAGGTGAAATAAGTTGTTCTTTTCAGAAATGTGTGACATGG
CTATTATATATTATCCCCCTAAACTATTTGATCATAAAACAAAAACAAAACTGATAAAGAGTCTGATTAACAGCAATGACA
AAACAATAAATAAAAAAGAAATGCAGTTCTTGAATACAGGATATAAAGGCTCAGTGCACCTTTTTTCATTTTCTTATTAT
TTCTTTTCCCTGGCTAGGTGAGTTGGCTGTTTTATATTGGCACCTAAGAGTTTGATACCCTACTAGAATAGTCAAGTAT
TTGACCTGGCCATGAGTAAAGATGTTTGTATTGACAGATGAGTCTATCTGTGTCAAACAGCTTTACCTTGAGAAAAATC
ACAACCTTTGAAAGCAGTAACACTTCAAAAGAAATATTGAAGATTGTGGCCACTTTCCCCCACCTCTCCCCAAAATCTATC
TTCATTCAAGTTTATTATAAGCAGCTCCTTTGGGTAAATTTGGGTGCGTGTCTTCTCCACCCCTCTGTATCCTTGGCT
TCTTCAGAGCGTCAATCAAGACAAGCAAAAGATTCAAGAAAAAAGGAAATGACCTTTCAGTACCTGAGTCTTCACAC
CAATTCATCATTTGCTAAGTGCTCCAAACTGCTGAGTACAGTATTTAGGAAGTGTCCAGTACATCAGCCTGGCATATAT
TGTTCTTAACCTGAGGTTACTAATGCCTATTGCAATGTGCTTTACGTCAAGCAAATGATGTGTTTAAAAACCTCTATG
TCTAGCATGAAGAAGAAATCTCTTTTCTTCTCATGTTACCTTAAAGATTTTTCATACCAATATACATCAGGGAGGAGCAA
ATTTTTGTTTCATATGTTACACATGTTATGGTGCACATGAAGACTGGAACCGGTAGTTATTTGTTGGGCATGTGTATGA
ATTAGTATGTAAATACACAGCATTTTTTTCTCTTCTAAGTTACTAAATATTAGATATTTAATGTATTTCTTTTGCTTT
GCTAATTTATTCAAAATGTAATCCTGACTAATCCATTATTTTGTAAACATGTCTACTTGATTAAATGTGTTTTTCCCCTCT
TCTAATTTCTGATCCACAAATTTTATAGCTATTCATTGTATTACTTAATCTAAGTCCACTAAAGATTATCCTTATTTCATG
TTTCTCCATTAAAGACAACGATAATATCATTGAGTTAGCTTAGTTCCGATAGAAATTTGGCTAGCATTCAATTATTGAT
TTTCTTGAGTTTTTGCAATTTTTTTTTTTTTTGCAATTTTGTCAACATTTGTATACCTCTGAAAGCATTTGTGTTTAAATA
CCTATTTCTTGATCAGTAGAATTGATATAGCTGACTTACACGGATCAATAACATGATTTTAAAGAGCATTTTCAAGGAAAT
CTCTCATCTGCATTGTCTTTTTTTTCTAACACAGTTTGCACATTTTACAAGTGAATAATTTTATATTACTTTACATATTTT
CCTGTAAAAATTAGAAAACCTGTATTTCTTTGGCACCCGAATGTGTCTTGAATTATTAATTTGTTAATTTTGTATGACAT
CCTTATTTAATTAGAGAAGCAATAATATTTCTCATGGGAATGCATGTATTAATACTTTTCAGAGGTCCAGAAAGTATCAGG
AGATTAAATACCTGAGATTAAAGAGTACTCTCTTCCCCTATTATGTTTCAAGTTCTGATTTTCCAGCTGTGTAGCTAGAAC
AAAGAAAGAAATGTGGGTTTTTTTTTTAAAGAAATAAGACAAGGCTAGAAGGTATGCCCTTGTGAGGGCGCCACTGACTGTGT
CATCACAGGAGGGCCCTGATACATGAATATCGGTCTCCAGGAAGCCAAGTATGATATTACAACCACATAATAATGTG
CTAACCTCATTACGGTAATCACAGATAATGTAGTATTTGTGTCTGCCATACAGTTTTTGAAGGTAAATATGGAACCTA
TTTTGGAAATTTACATAACATCTTAAGCTGTATTAATAGAACAGAAATAACCCAAAATAAGAGGTAATGAATGCACT
TGACCCTGCATCATTACAGACCTCAGCTGGAATATTGTGCTTCTTTTTGGGCTGCAGACAAACAGAAGAGGACTCAGGAG
AGTGACAAGAGAGGAAGCAAGCTCATGCCCTGTGCACATATAAAGTGGTTGAAAGACTGCAATTTGTAGAGAAAATGATG
CAGTAATTTGAAGGATGGGTACTGGGAAGAGGCTAGTTCTTTGAGGCTGCTAATCTGAAATATAACAAGTGGATGCACCT
GCAGTAAAGAGATTAAAGCCCAGAATGAGTCTGGATGTTCTAATGGTCAGAACAGGCATTTTCATATGACATGGCCTGC
ATTGGTCCAGGTGGCGAAGTAAGGATGGACAAACATGCGTTGTTTGAATGATAAAAAATCATAAGTAGATGATAACAT
TGATTTGCTGAAATTTTCTCTTTTTTGTGTTGGTGTAAACTTTATATGTCTGACTTTTTTGCCTTGTGTTTTTTTGTGTA
TCTTAGGACAAAGGTATTCTTAATCCCTTTCTTTGCTCTTGAAGATGCAACCATGCAGAAATGCATACCTCCTGT
AAATTGTTTCTGTCTTTTAGTAAACCTTTGTTTAAATGAGTCATATGTTTAGCAATTTTAACTTTTAACTTGGCTCT
AATTAATGATAATGATAGCGTGATTTATGGTCTTCTAAAGAAATGTAGACATAGAAAATGGAGATAGAGGTTAACATGTG
AAGAAGAGTTTATTTTGGGTTAGAAAATTAATATTGGCTTATGTCAAGATTAGGCCTTACTATTTGATTGTAC
GAGTTTACTTTAAATTTCTAGGCTTTTCAGGGCTTTGTAAAGATAAATTTTATTTTAAACAGCTTTAGATTTGCAGAAA
AATGGCAAAGATAGTGCAGGGAGTTTCCATATACCCCTCACCCACTGCCTTTTATTAAAGTCTTATATGAGTATGATAC
TTTTGTTACAATGAATGAACCAGTATTGGTACATTATTATTATTAAAGTCCCTATTTCATTATATATCCTTAGTTTAA
CCTAAGGTTCTTTTTTTTCTATTCCAGGGCCCCACTCAGGATACCACATTGCATTTAGTTCTCGTGTTCATTTATCTTT

230/375

GCTATAGAATTTTCTCAGATTTTCTTGTGTTTTTCATTACCTTGGCAGTTTTGAGGAGTACTGATTAGGTATTTTGTAGA
ATGTCTCTCAGTTGGAATTTTCTGATTGATTTTTCATGATTAGACTGTAGTTAGTGTGTTTTGGGGAGAGAGACCACAGAG
GGTAATGTGCCATTTTCCATCACACTGTCAACATGACTAAAGATGTTAACCTTGATCACCTGATCGAGGTGGATTTGG
TCAGGTTTTTCCACTATAAATGTATTATTTTCCCTTATTTTATTATTTTCATACCTACCCTTTGGAAGGAAGTCATGA
TAAACAACCCACACTTAAGAGGGTGTATACTCCATCTCCTTGAAGGCAGAGAATCTACATAAAATATTTGCAATTCTT
CTCCACAGAAGATTTGCTTATTCTCCCTCATTTAATTATTTCAGCATTATGTATATCAGTATGGACTCATGGATATTTA
TTTTATGCTTAGGTTATAATCCACTACTGTCATACTAATCGTGCCTGTGAAATTGTTCCAGCTTTGGCCATTGGGTACTA
TTTCTTGTGTCCCTTTGATACATCCCCACAATTGTGGTGGTTTTGTTTTCTGTTTTTGTGTTTTGTGTTGATGCAC
TTTCATCCTTTCTAGCATTACACAATACTTGAGGCTTATCAACAATATAACTCCTTCCTCATCATAGATTTCAGCCATTT
CTCCAAGGAGCACACGTTCCCTTTCATTGGAATGGTATTAATAAACCAAGATTTGAGCAATAGGTGTGTTTCATTGTTTT
TGGGTTGTCAATTCCTTTTGGCCTTCTTGGCTGACAGAGCAAGGACATATATTTGTGTATACCAACCTGTGTATGTACA
CATATCTAACAATCAGGAAGCATAAATAGATAGATGATAGATAGATAAGCATTAGTTCATACTGATATTTTCAAATCTA
ACTCATTACCACATGGGTCAATCTAGCTTCTTCCCTCTTGCCTATCTATAATCTTCCACTCCAACAGTGAAAACTACCA
TCCATCATTTGCTTACTTAATGTTCATTCAGTGGTGTGTTCCATTATCCTTACTGAAGTTGAAATACATAAATA
TAAGCTGAATTTTCTCAAACCTTAGAAAAATTATTTTCCCCAAAATGTTTTTTACCCTGCAAACTCTTAAGATTT
TAAATGTATTTGTGTCCCAAATGTTTTTCTGTACATAAAAATTGTATAGTCAACTTTATATTGTTTGCAGTTAACTT
GGGACATGGATAATGGAATTTCTCAGATAATTCCACAATTTAAGTTTATCTCTTGCCTTTCATTATTTCTAATCAGCATA
CTCTCCATATGACAATCTGACTGTATCTTGTCTGGTAACTTAAGGAGAATAGTAACTTGTAGTTTCCACCTTTAGCAACTGG
ACATTGGCCATACTCTGATTACCAAGAGAGTCTTGTAAATCACAAAGGAAGCAGCGATTGGCTTCAGATATTAAAG
CAACTTTTTTTGACGTGGCTAGATGGTTAGGAACACACTGAAGAATAGATTTTTCAGTAATGAGCCATACTTTCAATGAA
CGTCCCAAGGAAAACAATTTTAAGATCTTGCATAAAATAGTTCATATGCCTCAAATTTGCATTTAATCTTACATTAGG
TTGAAAGCTCATGTAGAAAACATGTAATGTAAAAATTGGAGAGCCCAAGAACACAGTCATTTCCCTTGGGTGCTAACA
AAAATATACTACCCAACAGTGCCTTTGTTTGCAGTCTAATATTTTAGAAGGAAAAAAGACCCCAAGCAAAACATGTT
TTTTTTTTCTTAGTCCAGAAAGAAGAAATACAGTGTGAACATAATACTTAGGGTAGACAAAATGGCCAAAATAGATTAA
GTTGGCATCCTTTTTTAGCTGCAGCTTCTTAACTTGTACCACACCCTGACATCATCTTCTTACATGGCCACACCTCAT
CCCCCATAGCCAAACATTATTTGCATTTCATCACTCATTTCGTAGATGCCAAATCAGACATGGTTCTTGGCCCTATGGAG
TTTATGATTAACCTGGGGAAGACATGCATTAATCAAATCTCTTCTCTCTCTCTCTCATTCTCTCACACACACACAC
ACACACACACACACACACACACACACATGAAACTGTGACTGGATCAGATGCTACGGGAGAAAGACACACAGGGTT
CAAAAATCTGTGAAGGGTTTTTTTTATCTGTTTTCAGGGAATAAGGAGATGCTTCTCTGAGGATGAGTAGTTTCAGGCTGT
GATTTGCAGGATCAGTAAGAATTAACCAGGAAAAGAAGGCAAGAGAGAGAACCCTATGTGGTGAATGAACAAATGTTTA
ATATAAAGGCAGCAGAAGAGCCAGGGTGGAGGCAGGAGGTTGGGAGATAAGGCTCTGGTGGCCATGCTAAAGATC
CTTACTTCCACCTGCAGTGTGGATCATCACAACATTTCCAAGATCAAGAATGCACCTTCCATCTGTGTTTCTCTTAA
AGTCAAAATATGGCCCATCTTTCAAAGGAAAATTCAAATGTTACCCATTTCAGTCTTCTAACACTTTTCATTTCTAATC
TAATTAGAAAAGATCATTCTGGCTAAGAGGTGGTATAGTAGTTTAAACCACCCACTCATATGCATGTGTTGTATTTAT
ATATAAAATTTTATTTTTCATTTCTTTTTCTTAGTGGCATTAGCAAAGCACTCCAGTTTCATTGAGTCTCTTTTAA
GTTTTGCTTCCCTCTCTCTCTCTCTTCACTATGCTCTGCTGTCTTGGTGTCTCCCCACTACTCATGTACTCTCCCTCC
ATTTCTCAATTTCTCATATGAGGGGAGGTGCCCCAGAGGGTGACGAAGGACAGTGTGGCAGAGGACAGGAGGAAGAAAC
ATAGGCACAGCTGCACTTCAGCATTCTGAAGCTGTAATCATCCTGAGCATCTGTCCAGGGACTTCTTGGCCAGTTGCT
TTGCCATCTGTACTTGAAGCCAAGGAGCATCAGGTGCTTTGCCTTTCTCACCAGGCTTACGCCATAGCCTTTTACCCC
CACTACCCACACCTCCAGTGATGCTGCAACTATTTCTCTCTGGGCTCCATGCAGTAACTTTCTGGGTTTTTTGGTT
GTTGTTTTTAGAGCATTTTTGTAGACAGGGTTTTACTCAGTCATCCAGACTGGAGTACAGTGGTGCAGTTATGGCTCACT
GTAGCCTTAACCTCCTGAGCTCAAGGCATCCTCCCACTTCAGCCTCTCAAGTAGGTGGGACTACAGGTGCAAACCAACA
TGCCTGGCTCATTTTTTTATTTTTTTGTAAATATAGGGTTTTTCCATGTTGCCCAAGTTGGTTTTGATCTCCCGGCTCA
AGCGATCCTCCTGGTTTCAGCCTCCCAAATGTTGGGATTATAGGCATTATCCACTGTGCCTGGCCCAAGTAATTTCTAA
ATAGTGACAGGCCTCCAGTCTCACCACTGTCCCATCTCTCTCTCTCTCTCTCTCTGTCAGAGACCTAAGAGCCAAGCGG
AGCCCATCTCCTTCTACACATTCTTCCAGCCTCTTTAGGACCTGATTTTCAACCTCATGTCACACACCCAGCTGCA
CCCTCCTGGTGGAAAGTGTGTTTGCAGCTTCTTAAAGATATCATCTGCTTTCATTTCATCAACCTTTGTCCATGGTGTTC
TTCTGACTAGAATGTGTCCCCCAACCCCTTTCCTGGTGGAGACCCCTCTCTCTCTTGTGACATCCCCTGCAACCTGTGCATCACTTT
TTCAAACATCGCTCCTCAAGTAGCATTGTGCATGCTGTTTTCTTGCCTTTCTCACTCACACAAATGGGAGTTTCTGGG
GGCCCTTTGTGCATCACCACCTGCCTGACTGGATACACTAACACTCAGCCTACCTGCCACCTACTTGAACCTTACAGGT
GTTTCTTTGATTAATTAATTAATTCATGTTTTCTCCTCTCTGGTTCAGTCTTCCACTTTACCTGTGCTTGTGTTGGATA
TGCAGAGCTCTAGCTGGCGAGAGTGTCTTCTGGCTAGATTGTCTACCAAAAAGAGAATGGGTTTTCCCCATCCGGGT
GTCTCTTAATTTTTTCTTCCACTCGTGTGTTGGACAAAATTATTTATGACTGGAAGGACCACATGGCAACTCTTCATGG
CTTTGAGGCCCCCTAATGAGTGTCCAAGGGAGATTCTCTCTCACTTCCAAGTTCATGGCAGACATTACCTACCCAGTC
AGCTTGAACCTGAGCTCATAGAAGTTTTATTTCTGGCTTTTGCAGATCATTTTTTATGCTGTTCCTCTCACCTGAAGCTC
CCTTTCTATCTCTCCCTAGTTGGATAATAGTACACATATTAAATGTGTACCTTGTACCAAGTATGCTGAGACCTGCTTA
TAACTAATTTTGCCTGATCTTCATGAATAGTGTGTTTGAATAGCATTTTTCTATCCCTGCAGATAGGAAAAC TAGAAAA
CAAAGAATAAGTAACCTCCCCAAGCTCACATGACTTGTAAAGTGGCAGAGCTGGGATTTGAACCAAGCCCTCTGAAGC

231/375

TAAAGCCTGTAGAGTACATGCTCCCTTCCTCCACATCACACTGCCCTGCTTGTTCACACTCAATGTGAGAATCCACTT
 CTCAGTTTTGTCTTGCTTATTCCAACTGTTTTGCAATGAATCTCTTTCAACAGCTCTATAGTTCTCGGCACTCACTTG
 GCATCCATCATTTTTCTATGTTGTCTATGTTTGGTATCTTTTCATGTATGTAATGTGCATCTCTTCTTAGGAGTAAGACCA
 GAACTTTTCTGCTCTGCAGTTTTCTCCCTGTGAGGGATGGTGAACTTGGTGGCTAAGAGCATGGTTTTATACAGACAGA
 CTTCTTAGGTTTATATTCTGGCTCTCCTCTGTACTTGTCTGTATCAGCTAGGGCTGATGTCTTCACTTTTTTATGATTCC
 ATTTCTACCTCTGTACAATAAGGCAAATATGAATACTTACCTCAGAGTGTGTGTGAAGATGGAATGAATTAATGGCC
 ATAAAGCACTTACAGCTGTGTCTGGTACATAGTGACCCTCACTAATGGTCACTTATAATTCCTTCACAACCTGTAAGG
 GTCTTTCCACCCAGGTGATGTCCCTATGTCTCAACTGAATGACTGGTTAGGGATATCTTTCCATGGGCTACTGTGGCT
 GCAGATAATTGCATTCTTATTGAGAGTTATGTTAACTAGTGTGGGCTTTTATTTGCTTCTCTCTTCTATCAATGAGT
 CCTGCTGCTTCAACCCTGGGTTAACTGAAATTTGAAACCTTTTTCTACTCAAATTCCTTTGATGCTGAAATTCCTCTGC
 GGTCACAGCTAAGCACTTGTGTGGTAACCTTCTCTCTGTCTCAGGCCTGCTGAGATCATCTGCTCAGCAGCATGTC
 TGACACCTGTTGCCACCTCACCAGCCACTTCTTGGTGACCTGGCAATGCCAGAGGGGCCCTGCCAGCTTGGAGCCC
 TGTGGCAATGCTGTTTGATTACAGCAAATGATAGCCTTCTGACATCCTTCTTCATTTTAGCAGCCAAATCACATGCAC
 CTTAATATTTATCAATAGCTAAGCAACACCGGAAGGAAGTGAGACAGAGCCTCTGGGCTAGTCACTATCTCTGATTTTA
 CAGAATGGTTAAGCCAGGTGTAAATATCTCACATAACATGCCCTGTTGTCTGAGGATTCATTCACCCGAGATATA
 ATTACCATATGAGGAAGTGAGAAATAGGGTTTCTTTCTAATACACAGAAAATAGAAAATAAGATGCTTTTCTGGCCCA
 TGTTATCAGTTTCTGTTAAGGTTCTGCTTTGTTTTAAACAGTCTGTTTGGCTTAAAAACAAACTCTAAGGAATTTT
 CTAAAAACATGCTCAACCTAAGTATATATATACTGTACTTTAAAGTGAACATATTTGAAATAATTGTGAGTGACAAA
 GAGACGGAAAAACATAGATTTTGAACCTAGCATTATTCTAATGATTTTTATCCAGTGGTTTTATTTGGAAATGAATTTT
 CATTCACAACATCTTCAATTTGTCTTCTAATTTTTCATGCAATTTGAAAGGGTTAGTTTCTTACCCACAGGATCATCTG
 GTCAAATCTCAAAAGATTGGCTAGGGCATCTGATTTTACAGGCAAATTTATATTTTGCCGTTTACAGGAAATAATTCCT
 TCATGGTTATCTTTTATAAAGAGCTTATTTGTATAATATATACATAGTATATATCAAATAAAAGATCTGGTGTATA
 AACATAAGAATAAGCAATTTCCCTTTTGTGATAGGAATATGAAATTCCTTCTGGTAGAGGACGTTTAAGAGCATGTCCA
 AAGAATGGCTAATCAATGAATCTCTCATTTTGTAAAGGAGACACTTAGATGCATTTCTGAAAAAACAAACAAACAA
 AACAAAAACAAACACTTTTGGGCTTTCTCTGTATTCTTCAAGCATTTCTAAACATTTATTGACATATGCAGTAGAGAA
 AAAGTGGTATCAGGAGGAAGGCAGTAAGTAGCCAGCAGTCACAAGGTACAAAGAATAAAATGCATGCAACATGTACAG
 TATTCATTTTCAAGGAGTTAATCTACATTTTATTTAATTTTTTTTTTTTTTTTTTGGACAGCGTTTCACTCTTGTGCCCAG
 GCTGGAGTGCACTGGTGCAGTCTCAGCTCACTGCAACATCTGCCTCCCGGGTTCAAGCAATTCCTCCGGCTCAGCCTCC
 CAAATAGCTGGGATTACAGGCATATGCCACCATGCCTGGCTAATTTTTTTGAATTTTGTAGTAGAGACGGGTTTTTGCCA
 TGTGGTTCAGGCTGGTCTCAAACCTTGACCACAGGTGATCTGCCTGCCTCGGCTGCCCCAAAGTGCTGGAATTACAGGC
 GTGAGCCACCATGCCTGGTCCCTTTTAAATATTTTAACTGAGACATATTACTGATGTACTACTCTTTCTAAAG
 TAATTAGAATAAATGTACACCTCTTCTTTAACTTTGCTATTTTCAAATTTTCCAAAAACAAACTAATATAAGTAA
 ATCCATAAGCAAAACGCTGTTAATTACCACCTTCCAAATCTGGAAGCGGTGACTTGCTTTACTAAGACAAGAACTTTA
 GACAGGTGAATACTTTTAAACAAGGAACACACTTAACTTTGTCTAATTGAGCAAATTACAAATCAGAGCTAGTAGCTTGT
 TAATTATAAGAATACTCTCCATTACTTGAATACGTGTACTAGTCATGGTAGGCAAAATAATACTCCAATAACGGACGACC
 CCACTGTGGATCTGAGAACCCCGCAGGCCAGCAGTCTCCATGTGATTGCCAAAAGCAATGCCGCCATATAAACCACAGG
 TGTCTACCTTCACCATGACAGAAGAAAGGGTTAGAGATTCCAGAAGTCACAATTAAATGCTTCCACCCGAAAAGTGGA
 TCATATTTTCAATTTCCAAAGCAATGCAACTTTGTTAACTCAAAGAGGCAGGGAAGTACAATTTTCTGTGGGGTTGGA
 AGAAGAAAACCTGGAAATTGGTGAACAGTTTTGAAATGTCTGCCATAACTTTTAAAGTGAGGAACCTTAGTGTTCTCTTACT
 CTGTCTATGTTTTTAAATATCTTTTTGATTGAAATCTTTCAAGGCTTTCCAGATCCCTGAAGATAAAATACAACTCTCC
 AACAAAGACCTTTTGGCCATCAGGAACGCAGCACCTGGCTCTCTCACTAGTATCTCTCTCTGTTTGGCCATGTCCCATTA
 AGACTGTCTCCAGAAACAATGAATTTATTGTTGCCTGTTTCTGCTAGCTTTTCCCGTATTTACACAGTTTGTCTTAT
 CTGCTGGGATTACCTTCCCTGACTATGCTCAATCTCTATCTCCCTTGGCAATTCCTCTCCAGGCCCCAGACCTGAGAA
 CTGGACCACTGCTCTGCTCTCTCTCTGAGCTTACCACATCCTGTGAAAACCTTGAACCTAATCTTACTAGGTTTTAA
 TCAACTGTTTACCTGTCTTTTCTCCCACTAAAGATGAAAAGTCGCAGAGATAGCGGAGAAACAAGAACAGATCTCACA
 GTCATGGTGCCAAAAGAGTATCTAACCCTGAATTGGAGTTCAATACATACTTGTGAATGAATGAGTGAGTGAATGAAT
 GAATGGGTTTTTTTTTGTGCTTTTCTATCTACCTGATTGGTAGCATATTCAGGACAGTATGTTTTCTCACCTTTTACATG
 CTATAAGACATAAAACAGATAATGCGTGTAGTGGGTTTCAATAAAGGTTTAAATAAACTTTTACCTACAGTTTTATCAC
 TAGGAATATATTTCTGATATCTATTACCTTTGAACTTTTTATGCCAGATTATGTTTTAAAAACATGGTGTCACTCGTAAG
 CCACATCTGGGATGATTTTTCATGGATTGATTAACTTTTACATTTCTTCCGAGTATTCAGTGCCAAGCCCCCTCTGGTGC
 CATGTCTTAAACCAATATTTTCAAGAACATTGCAAAACAAGGCTGCCCTTGTGCTTTGGAAACGCTTTCAATGACATG
 CCATTCCTTTCACTTGAATCTATTAAAGACTTGAAATTGTAGCAATCCATTGGACTATATGTCAAGAACTGGTATTT
 TTAAAGGGTGGCATGTTTCTTCAATTTATATGTAAATTTTCCATGTGCTTTGGAGAGAAAAATGGAAATTTTGTGAAC
 GTACTTAGCCCTTAAAGAATGTGATTGATCCTTGATGATGTGCTTCCAGACAACAACAAATACACAAGAACTCTTTTTG
 AGTGCTGTAAAGAGCTTCTCAAAATTTCCAGTATAATCCTAGGAAAACATTTTTTTTTTAATCTTTTCTAATCAGGAAGT
 CTTTAAAGTGTATTTTATCAAAATGTTTCAATGTTGTGGAACATACTCATGAGCTATTAGCTATAGCTGACTTTTGGAGG
 TTATAGGTGAAAAGTTTTACATCAGGAAGTTTCATGTAGAACAACAGCGTCATTCACGCTCATATCTGTGGCTTATA
 TCCAAGAGGGCCACTGGAGGCTTAGGGGCTTTGAAGTTAACAGCATGAAACTTCTCCAAAAACAAACATTTAATTTTTTT
 CTGTTCTGTTTTCTTAAACAAAGTCCATGTAATAAATGAAATAATTTTGAAGAACATTTGAATGAATCCCACATACCAGT
 GGGTCCCAAATTACTGGAAATCATAACATGGCTCATGTGAAGAAAGAATTATACTATTTTCAAGCTGTTGTATGTTAA

232/375

CTATTATAGTAAGTAGCATAAATGGCATAATATTTTGGCCGATATTTTCAATAAATCAATATTTTTTGCCTCAAAGGCCAA
ATTTAATAAATTTAATAATCTATAAGGTGAAGGATGGACAGGTATTCATGTAGGAATTTGACATGTGTTGTTTGCCTAAT
AGACTCATATTTAATAAATGAAGTAAATGATATTAAGCAGTTTTCTCATGACCACAGAGCACAGAGCCATAATTTGATTTA
AATATGAGTATTTCTGGCTCATGCTCTTTCTCTTTCTACCTATTGCCATTAGTGAAGGCTGCATTTAGTTTTTTTTTCA
AGAAGTGTCTAGCTTACAATTTTGAGCTTCACTACCCCCAACCTCATACACACCTCATGTGGCTTAGAGCTATATAAAA
TCCATGTTTTTTAAATACTTCTAAAATTGGACATTCAATATTATGTGTATGATGTTTTACATATAGTATGAGTGCAGTGA
AAGTTAGTTTTCTTAAGTTTTCTGAATTCAGCTGTTACCTAGCATGACTGCTTCAGCGAAGAGATAAGAGCTTCTTT
GACTTTTTTCCACTGGAATTTTTTCATGCCAGAAGAAATTGAACATGTGAGCCTGGTGTCTGGAAGAGTAGCCTGGATTTA
TGGTATCAGATGCACATTTTTTAACACCTTCAGTTTTCTCTTTAAAAATATCTCTTCAATCCCTTACTTTTTCTCTATTTGT
TTCAACATTAAATATGTTATTTTTCTTCAAATTTGTTGGCATTGACACCTCTTCTACAATTTCCAGTCACTGTCATGCT
ACTGCTTCAGAGGAATAGTCTTATATATAGAAAAACTTTTTTTTTTCTCAGCACATTTATATCTAAACAAGAGAATGAT
ATGCTTTTACCCAGTTATCTGCGTGGCTCACTTCCCTCAAGGCTTCACCCCAAAGCTACTTCAATGTAAACATTTTCTAT
CCATTAGATTGAGAACTGCAGTTTTAATCCCTAACCCCACTCCCGAGCTCCCTGCTAAAGTTTTCTCTATTGTCTCTTG
TCATTTTTCTGATATACCTTCTAATTTACCTATTTATTTTGTTTAATATTTCATATCCCTTCGACTGGAATGTGAACCTCA
ACAAAAGTTCATATTTATTGTCTTGTGTATCTCCATAGCTACAGTACCATTAATATATAGTAGATGCTCAGGAAAGA
TTTATAGGAAGAAAAATGAAAGCATGGTTTGCATAAAATCTAAATCTATAAACATTTCTTTTTTTAGTAGTATTGTTAA
ACCTTACGGTCTCTGTACAACAGGTGTATGCGCTCTAGAGCCACCAATAATATTCCAATATTAATATACATAATTTT
ATAAACAGGTGTGATTTTAATGTCTCTAGACCTTTCCAACCAGAAAAGCTGAATCCAGGTACTGCTGGTCTTTTTCTCT
CCATAGGTTCTCATTTTTCCCTGATGCGATTATTGCCTTTTCTGTTTATACTTTTCTTCCCTTTAGGTGACTTCACTTACA
AATATAGGAATGCTGATTTCATGTTTAGCATTGTGTGGTTTTAGTATTTATTTTCTGTATTTCCACATTGCTATTTTAGC
TCATTCTTTAATTAATAAAATGCCCTATTCTCTCACAGTATCAGCAACTAAAAGAAGGATACATCACCTACAGTTGTT
AGTGTGAAGTCTTATATTAACCTCATAGGATATATATTGGTAGACATAAACCTACTGACTAAATTATTTCTGAAGTATA
CTCTACAAACCATCATTTGATTTTTTACATTTGACAAAGTGGAAAAAAGCCTGGCCACAATCTTTAACCTGCCCCA
GTGTCTCTGGCTTTTAGGCACACAGCCAGTCGGCAATGGCGGCAGGGGTGGCATATAAAGATTCTAGATCTCAAATGC
CAACCTGGCCAGAAAATAAACTCACTATGTGATACCATTGGAACAAGCTTCTATACCAATGTAGGGGGTGTAGGAGGA
TAATATACATTGCAAATTTATGTAAAACAGACCATGTGGTATTTCCAATAGTTGTTTACAACATTGCTTAAAAATGATAT
AAATGGCCTTATGGATAAAAGTAGAAGTTTAATTTTAGAATAGTTCTCTATTTTAAAGACTAGATTAGCAAAAATCCTTA
TGGCATATGTTTACTCTTGGGGAACCTTGAGAGATAGTGAACAAGAACGTTAGATCATAGACTTCTTGGCTGCAAAAA
GTTTATTTATTTTATCATATTTTACTCTGTTATCTCTTTTATTTTATTTGAAAAGCTTTGTATAAAGGATTTTTTAGAGATGGCAT
TTCATTAAAGGTATATTTTATTAGAAAACAACTTGAATAATTTAAAATTACAAAAGGTAAGTCATTTTATGTATTTGCC
TACTTGTTTTTTGTTTTTCTCCCTGCCACCTCCCTTTCTTCCCTTGTCTTCCCTTCCCTCCCTTCCATCCTTCCATCCTT
TCTTTATTCATGCCCTGCCTATTTAGAAAAGGATTTGCAGTAAGTTACAAAAGTACAAAGTCAATAATTTTTTTTTTAA
TTCAGAAATGTTAAAAAGAGAAAAATTGGGTGAAGAGAAAGTGAATATTTCAATAATAAGAGTCATAGTGCTTCCCTGTGA
GGAGCCCAGAAACCCATCTCATAGTTACGTGGTGGCCAAACTTAGCAGGAAAACAAAAGAAATGCTAGACGAGAAGAAC
ACAACATCCATTTCTCAGGAAAGACTAAGTTTTCTCGTACAGAACCCTGAAATGTATTCTCCCTGGGATACTGTTTG
GATAAACAGTGAGTGCTGTAATAGTCAATGTCTTTACCCACTGCTTTCACAGCAAAGCAGAATTTCCCAAGGTAAGAATGT
GACCATGTAACTCATTGCCTCACCATTGTTTCTCTCCACTCTAATATTTTCACTACTAAATGTGTGTGTCTCTTAGGGTT
GCTGTGCTGAATAAGTGAGAGTCACCTGGCACAGCAGACATCTAGTGTGTGCTAAAGAAATGTACAGAGAATGAGAGAG
AATTTGAATAAAAAATGTAATAGAAATATTATACAGAAGTTAGGAATTAATTTACAAGTAGTGTAAGAGATACTCTGTCT
CAGATGTGCAGGCCACTAGTAGTGAGTGACACTCACTGCCCTCTCAAGAGAACCTAGTAGTCAGAAAAGTGAAGAAA
TGACATAGCTTTTTTACACTATATTATGTAGAAAGCTTATTTTTTAAATGTTAAACCAAGAGCAAGGTCCATAAACTCTAA
TACCTCCAGAAAGCAAAAAGACATTGAGATACATTTAGAGAAATAGAGGAAACTGAGCTAGATATTCACGTGAAATA
GGATCATCTCCACATCTCCAGCAAATAAATTGAGGTGACCAAGGTCCCAGGGAGCACAGATGGTCATATTCTAATGAAG
CTCTGGCTCAAAAACACACAAGCTGAAAACAAGGCGAGGATGCTTCATAACAATGTCCTTTTGTAGGAGAAAGTGAGGAT
TAGTGATGAGGGTAGGAGTGAGAGCAAGAGACAGGGATTAATTTGCATAGCCACCTTGGAAATCCCAAAGTGTCAATGGTG
TCAGTGATGCTGTTTGCTTGAGTCCCTAAAGGGTTGAATGAAAGAAGTTAACTAGATACAGAGTTTACAGAAGGTCAAT
AATCTTAGCTTTCCAACAAGTTGGAGATCGGGGTAAGGAGAAGGGCAGACCTTAAGAAAAGAGTTATACTTATTGCCAG
GAAACAGTGCTTCTTTTTGCTGTTTTTCCACAAACAGATTTACCTTTGCCCTATGCATTTTCATCTTATTTTAAAAAACA
AACTTTTTATTTTAGGTTTCAAGGGTACATATGGAGATTTTTTTTTAATATAGGTAAGCTCCTGTGATGGGGGTTTGTGT
ACAGATTATTTTATCACCAGGAACCTAAGCCTACTACCCAATAGTTATTTTCTCTGGTTGTCTCCCTCATACCACCTC
CACCTCTGGTAGGCCCCAGTATGCTGATCCTCTTTGTGTCCATGTATTTTATTATTTAGCTCCCACTTACAAGTGAG
AGCATACAGTATTTGGTTTTGTGTTTCTGCGTTAGTTTGCTAAGGATAATGCCTCTAGCTCCATCCACGTTTTGCAGAG
GACATGATTGCATTTTTGTATGACTGTATAGCATTCCATTATGTACCTGTACCAATTTCTTTATCCAATCTGCCATT
GATGGGCATTTAGGTTGATTCCATGTCTTTGCTATGGTGAATAGTCTACAACGAACATATGTTGTGTCATGTGCCTTTTAT
GGTAGAATTATTTATATTCTTTGGGTATATACCCAGGAATGAGCTTCTTACACCCCCAACCCCTTGGAAAGTTTAGAATGGAAG
TTTTCAGATGTCAACAGCTGCTTTCCACAATATTTAGTCTTCTTACACCCCCAACCCCTTGGAAAGTTTAGAATGGAAG
CACATTTCTTCAGATGATTATTAACCTTTGTGCTTTTTCTGTTTTTACTGTCATCATTTAAATATAGGTGTGGAACATCGA
AAAGGGCCCTAAGAGCCTCTATTGTCAAGTATGACTGACCTCTCTTGGTAAAGCGAGACCTAGTTCTGACTGAGATTCCCT
CCAGTCGTTTTATGTTTAACTTTCCATTTCAGTTTCAGTTGTATTTTATTGTGTTTTCTGCCCAGTGAGATTTCAGCATA
GATGACACCTAAGGAAAAATGCTAGTCATAGTGTGAGAAATCATAGCCTTCTCTTCAAATGCTTTTATTTCATATTTCT

233/375

TTGGACTTGTATTTTAGATATTGCTCGCCAAATTTAGCCATCTTTCTTGGTAGACATTTCTGAAAGTTTAGTGATTAAAA
GCTTAGAGTCTAGAGTTAAATGGAGTCTAGAGTTAAATAGTCTGGGTGTGGACTCTGGCCTGGTCACTTGCCATCTGTG
GGCAGGCCACTTCTTTAAGCCTCAATTTTCTCCCTAAAAAATGGAGGGGATGGGGCCATCATGATACTTACTTTAT
AAAGTGGTTGTGAAGATTCAAGGAGAAGTTGATACATATAAAGTTCTTAGAACAGTGCTGGCAGGCTGTAAACAATA
TAAAAAGTTAATCATTATTTTCAGAAAAAAGTTGAGTCAAACCTGAAACAGTGGTACAATGTCAAGAGCAGGAACCTT
GCCTTATTAATTGTGTCTTCTAACTCTATGGACTTAGGATCTGAGACTCTAGTTCCTACAACTCATCCATCCTGGGG
CCTGGCATATGGGAGCTATAAACCACATCAGCCCTCCTTTGCTCTTTTTCTTAGGGCTGCCCTGAGGAAGAAAGCTAA
TGTGTATAACATCTAGCATTATGCCAGGTATGTGGCCAGAGCTCAAAAACTATAGCTATTATTGTATTATATACTTTG
CTCTATTTTTTATACTCCTGGTTAATGACGGAGAGCTCTGTGAGGGGCTGCTAGAGGGAAGGTTCAATTATTTTAGAAG
CTTTAGTTCCTCCACATTTCACTTTGTAATGTTTGCTTGCTTGTATTTATTAAACAATAGTTTACTATACCTCGTTCC
TAAATATTAAGTATAGCTTATTATGCCCTGTTAATCTTTCTCAGTGGCATAACAATAATTTAAATATCTGCTTGAAAA
TCTCACCAAGCATTCATTTTAATGTGGCTTAGAATGTTATATAATATGAAAAAGTACGTGTTCTTTCAGAAATTAGTTC
CAAAGAACTCCCTATATCTAGAGACAGGCTGTGAGAATGGAGAAAGTTGAGGAGTGTCTCTGTTAGGAATCTTACTACT
GCTTTTAAATTTTCATGGAACACCTATTAAATTGCTTCGCAGCTAGGTTATGAGGAAGGGGAGCCCTGCTCACTCTTTTA
AAGTTAAAGTGAAAAGTTACTTGCGGGTGATTAGGGAAGAACCTCTCAGAGGAGTGGACTGTTGGCATGGAGACCCCA
CATATAACTCTTGGGGGATGGCAAAAACCTTGAGAGGAGTGTCTTATTTCTCACCTCCTAAAAATGCTTTTCCAGCTTT
CTGTGGTGAGAGAGAATGAGACAGCAGTCATACCTAACAGTTGGTGAAACAGTTCTATGGGAGTGAGGGAAGTGAGGG
GCCTAGGATGAGTCAGAAACATGTACATACGGAAGGGAGAGAGACAATCCTGATTAAATTTGTGCCTTCTTGCAAAAAT
ATATATATTTCCACATTTGATACAAAGTGAAGTATATAACCTTGACAAAGCGATATCTGTGAGAAAAAATAGAAAA
ATTGCTTTAAATAAACAGTCCTTCAAAGATGTGAGGCACAGAGACTTTCTGAGAAAAATGTTTCCAACTTTTAAGGAA
CAAATAGTATGTTATATAAATTTCTAGAGTTTGTGAAAAGAAAATCAACTTTTCAATTCACTATCAAGTAGACCTA
TTTGCAATAAGAAGGAAGTCCCTCAACCAATCTTACTTTTGGTAGATAAAATCTTAAATACAACCTGGTAAATTTGAAT
CTTGCAATTTTGTAAAAGATTCTATGCTCATGTCAAATAAGGCCGAGTCTGTAAATGTACATATAGTTAATTTTGATCAA
ATCTGGTCACAGAATCCATCATATTAATATGGTGAAAGAAAAAGCAATAGACTTGTATTGACAGGTGCCACAGTGGCAT
TTGACTAAAACCTTAATATCCATTTGTTGTTAGTTTTTTTTTAAAGGATGCAGTGAAATAGCAACAGAAAGATATAGTGT
TTATTTCAATGGTGAAACCAATTTTTTAAAGTGTGAGTCGTTTTCTATTAAAGTCAGCTTAGTTATAAGCAATAAGACGTAA
CATAATATTTGTATGTAATATTTGTTTGGGAAGTTGTATAGTTATTGTCAAGTTATTGTTCTAGTACAACAACCTTGAAA
CATAAAATATAAAATGAAAACCTGACTTTATAGCTATGTGGGTATTTACCTGGAAGAGCCAAAGGAATTAGTTGAAATGT
TATTAGAAATGATTAGTAATTCAGATAGGTAGCCAAATACAAAATTACATATAAGAAAGCTATTAGCTTTTTTATAGA
AAGTAATAATCAGTTAGATATTATAATGAAAAAATAAAATACCTCTTTATTTACTTACTTTCTTACTGTTGTCCAGGC
TGGAGTACAATGGCACAATCTCAGCTCACTGCAACCTTCACTCCTAGGCTCAAGCAATCTTCTGCTCTCAGCCTCTTG
AGTAGCTAGGTCTACAGACTCCACCACCACCCCTGGACAGTCTTTTCAAAAATTTTTTGTAGAGATGGGCTCTTGCTGT
GTTCCCTAGGCTGGTCTCAAACTCCTGGGCTCAAGCAATCGCTGTGTGACCTCTCAAGGTGCTGGGATTTATAGGTG
TGAACCACTGTGCCCGGCCAATTTCTTTTAAATAGCACAGATTCTAGTCAAAAAACATACTACACCTATATTTATGA
GTGAAAAATAATAAGAAATTAGAAGGGTTTTTTTTGGTATTGTTGTGTAAGAAAAACAAAAATGTCTTAACTAATGCTAAACA
ATCCACAATATTCATTCCACTATAGGCAATTCGAATCACATTTTATTTTTGATTTTAAATAAAGTATTTCAAAAAATCAAG
CTAACATGGGAAAATCAAGAAAAAGTTGAAATAAAGCACAGTGGGTAAAGGTTGGAAGGATGTAGAACACACCATTCCA
GAGATTATATCATAAAAATTACAGTAACATATATCATGTAATATATAATATTGTAAGAATTAGGACGGTGGCTCAAATG
AAGAATTAGATAAAGTTGATTGATAGACTATAGATTTCAAATAAGACTCATTATGTATTGTGTGTGTGTGTGTGTGT
GTGTGTGACTGAAGTAGCATTTTATTCAATGAGAAAAGGGATGATTATTCAATAAATGGTGTGAAAGCAACAGCTATC
GTTTGGGAAAATAATATAAAGTTAGATTCTTTCTTTAAACCTTATATAAAAAATATACATTGGATATATATTTTATTAAA
TATTTATTTTAAATAAAGATTTCAATTAATATATAATATATAATTTTATTAATGTAACAACTAAAAAGTAGTTTAGTTAAA
ATTACTAAAATAAAAAATAAAATGAGTATTTAAATTTCAACATAGGGAGGATATTTCTAAGCATATCACTAGAGCGAGAA
AGCATGAAGAAAATGTCTGATAGATGTGTATACATTAAGGAATCAAATTTTTCTACACATCAAAAAACCCATAAAGAAA
ACGTAAAGGCAAATGAAAAGGGTGGGATTCTATTTCCAGTGTTACTAAAGAGACATTGACTTTAATGTCTTAAAAATCC
TTAGAAATCGTCCAGGTGGGGTGGCTCACGCCTATAATCCCAGCACTTTGGGAGGCTGGGGCAGGTGGATCACGAGGTC
AGGAGTTTGAGACCAGCCTGACCAACATGGTGAAACCCCTCTCTACTAAAAAATAAAAAATTAGCCAGGTGTGGTGG
CACGTGCCTGTCAATCCAGCTACTTAGGAGGCTGAGATAGGAGAATCTCTTGAACCTGGTAGGCGGAGGTTGCAGTAAG
CTGAGTCACTGCCACTGCACCTCAGCCTGGGCGCAGAGTGAGACTCTGTCTCAAAAAAAAAAAAAATTTCTTAGAAATTA
TAAGGAAAAAATGACCTTTCTTCCAGGAAAAATGAACACAATCCATAAGAAAACAAATTTGGTGAGTTACATGAATAAAA
CCCCAACTTTAAAGAAATACAAAATTAACAATAGTGAACATAACATTTTCTCTAAAAGAGTATTCAAGATTAAAAAACAA
GTCAAAACTAGATGATAACAAATTCAGCGTATTGACTAAAGTCAGGACATTCTTATTCATTAGCAATGAAAGTGAAAGT
TTGAGTAGCTTTCTAGAAGAGAATTCAAGTCACACTATGAACCAACAATTTTACTTTGAAGAATTTATCCTAAGAAAAA
AATTAAGAATATGTGAAAAGATTAGTTACATCAATGTTTATTATAGTGAAAACTGAAAATGTGCCAAGAAAAAAT
GAGCCAAATATTCAGCAGCGGAATTAGCACAAATACCTTGATATGTTATCAAGGTAAATGTGTATGATAGGATACTG
ATGCATAAGGATAATTTTTAACATGGTAGATTTTCATTATGTTAAATGAAAAAATAAAAAATACATAAAATGAGAGCCC
ATTTTTATAATAAAAAATATATAGTCAATTCAGGAAAACATGTAGACGGACATCAAAAAATACCAACAACAGGTATGGT
TCAAGTGTTATAGGTGGTTTTTCAGCACATAGATTACCCCTAGCAAGAGACCTCTGTGACACTTCGTTTCTTCATCTG
TGAAATAAAGGAATCATACTAGATTAGTTCTAAATGCTTTTAGCAAAAAATTTTCAATTTCTATGAGTATTGATGGTT
AATAACCTTGAGAAAAATGTTTATTATTATTGAACTTTGGAGTTAGTAGAGTAAACCAAGTTTATCCTGAGCTATCCC

234/375

[illegible]

235/375

TGGCTGGTCTCTTTACCTCTGAGGTTCTTTTGCTTTTATGTAATTGGATTTTAACTCAGAACTGTAAGGTTAAAG
ATGATAATGTATAAAATCAGTACTCTGAGTAATGATCAAAATTTTCTGTTGCCATCCACACATTTGAGTGAGATGTAGT
GAGTGCTAGAAAATAAAGCAGTTCGTATCAAAAAGGGTGTGTTGAAAGAAATAAACTAATCCTTGAGAAACACTGTCAT
GCAATCTCATATCTAGAAAATTGTGCCTATGTTCTGTCTATAAAATTGATGAATTGGCAGGGTGTACATTTAGGACACAC
ATTGACACTACATATGACATTTGTAAAAACACTTGCTAATTCAGCTAACAGCTCGCTTCTCCCTTCTCCCTACTACTC
ACTGTGGAGAGAGCTTCCAGCTAATAGCTTAGAATCTCCAGACTAACCAACCATTGATGGAACCAGGTGCTATGTGAT
TGTAGGAATTTATTTGTGCTCTGAATGTTAACTAAAAGTAATGGGCTTCTTATTTTGTCTTTTCTTTTGTGTTATA
GACGGCAAAGACTGTTTCTCATCAGTCTCATATAGCTAAATTAGATTTATCTCTCATGCTGACTGATTAAGGGGTTAA
ATTCTGGGCACGTTGTCCCTGAGTCCCTCTGAAATCCATGTCAGAATAGAAGTGCTCATTACCAGACTCGATGAGGAGC
TCCTTTTCCAGAACTTCTCTCTGCTACACTCTAAGGACCAAGCACCTCTGCCTAAATTCGAAGCAACCATGGCCTGTGG
CAGTCTTGGAACTTTTGCCCTCTGGCATGGGTAGAAGTCAATGGGTAAATCAATCCCTGAGTCTCTTCTTCAA
TGAATGAGAGAATCCAGGAATGTGTTGCCAGTTGCCCTTTTCTTGTACCTAGTTTTCTCTGTCGAGAATGATGACAGT
CTATTTCCACACCTCCCTCCTGCCACTACAGGATTTATGGTCTGCATGCCCCAGTTGTGAAGCTGGCATGTAGCATT
TGTTGCCACAGGCTGTGAGTGTGTTAGAAGTTTGTGTTTGTATTTCCAGGGCTACAGTTTGAATATTGAAGGAACAAAC
AGCAAAACAATTCAGAGGTCAAGCTGTGACTGCTTCCCTCATTTGGAGAGCTTATTTTATGTCTGTATATTCTATACTCAG
ATTCCACATAACTTGTTTTTTCCACCTTCATTGCTTTGGTTAGATGCTTTCAAGTGCATTTTTTCTCTAAGAAATCTC
CATAGAAGAGTTGTTTACTTGAAGTGATGGGTGAGCAAAGTTTGCCTGACGTGGAACCTCAGTAACCTTCCCTAAGGA
AAAGTTCTGGCGTGTAGGGGTGGGCGCTCTTCCATCCAGACGGATGGGAACATAGCCAAGCAGCCAGGAGACACATTGA
CTTGAGCACTGGGAAGGATGCCTAGCCAGAAAAGTCCCAGCAGCTGGGTCTGTTAATCTTTTCTGAATGAACCAGCA
GGCAGTTGACCTCTCTAAACCTGTCTGGAATCCTTTTATATCTTTGTAGTCACCTTTTTACCCCTCAAGAATTCCTCT
ATAAGTTGTTCTTAATAAGACTCTTTTGGCCACTTCCCTTGACCTTCTGAGTTGAATATGAATTTCACTAATTGGT
GAAAGAAACCACCATGACCTTGATAAAGCCATTTCTACTCTGGTTCCCTCCCTTCTAAGAATTTGTTCAATCAAGCAAGT
ATTTGAGTCTAAATGGATCCACTTGGACATTTTAATAATTATCATGAACCTCAGTATCCTTAAAGTGTGGCTAAAACAG
GCTCAAAAATTCAGATAGTGAATCTACTTTCTCTCTCCCTCCTCCAGATTTAAGTGGATTAATTCACCTTCACTATGC
CAGCACTGAGTACAGAATAATTTATTTCTGTGTCGTTTCATGATGAAAGTCCAGCTGGCATTAGCTCAAATTATGCAG
CTGGCTATTAATTGAAGAAAATTCCTGTCACTCCTCAGTCAAAACATGATCTGATTACAGCAGATCCTTTTCACTCTCA
TCTCTTCTATTCTACCAGTAGAATAAATGTAAATAACTTTCACCTTGGCTCTGCTTGTCTATGGATTGTAATTTGGC
AGCATGCAGACTGACCACATTACTGTTTGGGAGCGGCTGTGTTTCAGTTGATTAGTATTTCTAGAAGAGTTTGCACAT
TTCATCTCTGAGGCTGAATGATGTCCACTAGCAGGAAATATTGTAGTCTGCCTTTTTTCTTACATACTGTATACTAAA
TTTTCAATCTAATTTCAACAAGATGTCAAATTCAGCACCTGTAGGGCAGGTGTTGGTCTTCTATGAATTGATTATATGT
TTTTCTATCATACTGGATGGTGTACAAGCCAGGTGTATTTTAAATAGAATTTCAAGAGAGAGATTGTTCTGGAATT
TAGAAATATATATTATGTGCCAAAATTTTGTAGTGTGATTTTGTAAATCTTAAATACAAACTACTTGGCATGAA
GAGATGCTATAGTATGTTAAACAATTGTGGAACCTTTTTCATAAGATGAAATTCGTGTCAGAAATGAGGGAGCAGAATTC
TGTGGGAGTGCTAAAATGGTTCATCAATTTGATCCTCACAGCATATGAGAAATCACCAATTATATTACTCTCTGAAAAT
ATGTTTCAGTATCAAGGGCCTCTTTTGGCCCTTCCCTCCATCCCAATGTCTGTACTCTCTGTACAGTGTGATCACTGGGT
GCTGCATGACCAGTCATTATTATACGCTCAGCCCTGAAAATGAACCTTAAGATGGTAAATCATACCTTGCCAGGATTTG
GGTGGCTGTGAGGGATTCTAGTAGGATTTTAGCAACAGGGACTGGAAAAGAAATCAGAACTTGGCAGAGAAAAAATAGC
ACTAGGATACTAGAAGAGACCTGGGAGAACTAGCTTGACCTTAGAGGCTGGTCTTGTGAGTCAATTTGAGAAATAGTATC
AAAAGGGCATAAGAGGGCCCGGCATAGATTAGGCTATTTGGGGTTACAGGAGATCCAAAGCTAGAAGGGGCAACAAAAC
ATTGTGGTATGAGGCCATCCTAATTTGAACATCAGGCACAGGATCTAGTGTCCATGAAGTAGATCTCAGGGAATGGGCA
GCCTGAGAAGAAGAGTAGATCATGCAGAAGCCAGCAGTCACCCCTAGATCCAGATCTGAGTGTCTATGACCTAGATGCA
TTAAAATCCTTATAATGGGTCCCACCTGGCAGGATTTCTTTCAGGAAGCTCAGGCTGAGCCTGAAGTGTAGTATTCAGC
TGAAGGGAAGGTAAAGAACTATAAGTTGATAGACTTGCAAAATGGAGAGGCTGCTTTTAGGAAACCATTGATAATAGTA
TCAATCCCATTGATAATATATGATTGCCCTTTTATAAGGCCATGTGCTTTCTGCACAAATTATGATAAAGTATTAGC
CAAACCTGTATTCCCTATATAAAGGGGGAGGAGATAGTATCCCATGGGGAATTCCTTCCCATATTATAAACTGGTAGAC
AACTTAAGCAAAAATGTTTTTACTCATATGAACACTGTTGAAGTATAAAGCCAGGTATTTAAGTCATGATAGGTGTTTA
TTTACTTTGAACATTTGCCAGAAGTTTGATGATGGGTATATTTGTAGACTGGGTGTTAGAGGTTGTTATATTCTAAAA
GATATCTTCTGATTAATTTTCTTCAATTTATAAAAAAATCTATTTTGATAACATTTAATTTATGAACCTTTGGTGTCTATG
TTACACTTTTATACATTTTGGTTGTACATTCCCTGTAATGCTTACAGAGACAGCCAGTCAGGCAATAATTGCTACATACT
GAGCGCTTCTATTTTCTGAGTACTATTGTAATTTATAGAGATAAAGCAGTGAACCAGACAGAGTCTCCATCCTAAAAG
AGCCTAGTAGAGGATGGGAAGTGTAGTATCTGTAATTTGTACAGCATGGTACACTTGCTTCTTTCAGATGCCATTA
TTAAGGGCGTCTTTTCTTAAATTCGAGATCCCTAAGTCTGATGCGAAGTGTAGGATTTAGACCTTCTTAAG
GTCTTCTTTCTTCTTAAATGAATATTGAAATAAATCTATAAGATAAAAAATAATCCTACCACCAAGCCCCAATTAAGAC
TGGATTTTAACTTGCTCTTCTCAGCACAATGACACAACAGAGGACACAGAGGTTAATGGAATGTCTTTGGAGCAAAGG
AGATTTCAAAACCACAGTTTGTGATTTGATGATCAGCTCTGCAAAATGTTTAAAGAAGATTTCTTACTCATATCTT
ATAAGTTAAGACTATAAATGGTTTAAATGGGGGAGGATGTGACAGGATTTGAAAATCTTCCCTTCTTTGTGGCTATGA
GAATTCACACTGAGCAACAGGGAAGAGAAGGAAGTGAAGTGAAGCTGTGTGTGGGCCCTCATTGTTCCAGGA
TTTACAAAGGGCTACGCTGTCTCATATTAATAAATAGGCTCCTGCTCTTGTGCCAGCTTAAATGCCACCTTTGGGCTCC
CGAACAAGAAATCACAATTGAGGCAAAACATGTTTGTCTATTGAAGGCAAAACCTCCTTAGAGCAATTTTGGGGTGT
TTTTCCATTTAATTTTTTAACTTGCAGAAATAGCCCTCTTTTTTCTGTTTTTGGTTTTTTTGTTTTTTTT

[illegible]

Fig. 6.231

237/375

TTATTTCCCTGTAGGAAAAAGTTGAAACACTATTGTTGACAACAGGGCCCAAATAGGTATCAGCTTGATGTACTTTATCA
 CATATTATCTTTTTTGTGTTTGTGCATCATCCCTAGGAGGTAAATATGTAACACTTTGGTTTCATTAGCATCACAACAGATT
 ATTAGGCAAAATCAACAGAAATGAAATTAAGTTATATTATCTAATTGAAAAAGCCTTCACTTATATTTTCAAGCATTAG
 TTCTTATCCACTTTCAATCACCTGGGGAACTTTAAAAATCTGATGCCTGGGCCAGACACCCAGAAAAATGCATCAGA
 CTTTCTGGGGACAGGACCCAGGTGACTGTATTTTCTAAATGCTTTTCATGACTCCGCTGCTTTAGAGGTTTCACAGACT
 TCCACTTAAAGAACTGCTGGTTAAGAAATGCATCCCTACTTGTCTCGGACTCCCAGGGATATCACTTTTCACCTGTTCT
 ATCATTTAGAAAAAATGATTTGAATCAGCTAGATACATGATAGAGGACCCCCCCCCACACACACACACACACCAATC
 TAAGCACAAAATATCTTGTGTTGCTCAATAGTTTGCATGGATAAGTAATGCAGAATAAGCATCATACCCAATATTAAT
 AAATACTTAACAAGAAGCCCCAAGATTTTACCTTGTGTTTCTTATTTTTTCTTTCAGCCATCACATTCAAACCTGCCCCAAA
 GGTTTTCTCACATTCTGGCCTCCATCACCACCCTACTGCTTTGGCCTGGCCTTTTGTCAAGCTAGAAATTGCCAGAATT
 TCCTGACAACAGGCTCTGTAAGATTTCAGTTTLAGAGCTTACACTTTGGCTGGAGTTTCATCTTCTTAAAAAGAGACTGTGA
 TATGTAAATCCACAACCTGAAATCTCATTTGGCTCTCCATTGCCTACCAATAACCCAAAATCCTCTACTCAGGAAGTCTCT
 GGATGGTGTAACTCCATTGCACACAGGTTTCATCCACAAGGCTCTTTGGTAATGGGGTACTTTTCATGTGCATACTATTTC
 TGCTGCTCTTGTGGAAAGAGTCTTCAACCCCATCTGTATACCTGGACACTCACCTGAGACCCAGCTGAAACAGACCT
 TGTCTATCTCGGACCTGCCCTTGGTTCTGTTGAAAGAATTAGCCACCAGATCCTTGAGGCTGTCTCAGGACTTTTGCTT
 CACCTTTATTATAACAATTTGGAATGCAGGCAAAATAGTGTTTCCAGTTACTAAAATAAACTATAGACCATAACAATATG
 TTTGTTTTGTGCTTATTTAACTCGCAGGGGAAAAATACCCATATTTTTTAAGACTCTGGATTTAAAAAATCTGGTTGATTA
 TATGAGAATATTGTTGGCTTGTCTGTTTGATTTTGTCTTTTTTGGGTTGCCAATAAAATTTTAGAGCAAGAAAATCAAT
 CTCTGGAAAAATATGTTCTAAAAATGCAAGAGAAAAATCCAAGAAAAATAAGCTAGATTTCAATTAACATGTGAAAAGCATTT
 CTTAATATATACAATGTTTATTTTACATGGATAATTTATGTAAGTTATTTGAATAAATAATACTTTTAGGTTTGGGTTTT
 AGGGGAGGTTTTAGGTTTGGGTTGCAGCAGAGGCTTTTTTCAGCTGATTCAAATATCTAGTTTTCAAAATACTCTGCCCA
 CATGATTTTTTAGATATGACTTAGCCTTAATTGCTGACTCAGATTTTCACCTTTTAAAAAGCAATTGTGCTTTTTTCATAT
 AACTATCAAACAAGATTATAAGATATTTTAAGGTAAGAAAAGTAAAGGGCATCCACTAATGATCATCAGAATCACCTG
 GAAGGGCCAATAGCCACACATTACCAGGCCCTTCCCCAAAATTTCTAATCTCTGTAGATCTGTGGTACAGCCTCCAAT
 TTTTGTCTTCTAATAAGACCCCCAAGTGACACTAATGTCTGTAGTCTGTTGACTAACAATGAATAGCTTTGTGTTGCTGCAAAAC
 TAACAATTTTATTGGTTGAGTTTTCACCACAGTGTGCATATCTGTTGACTAACAATGAATAGCTTTGTGTTGCTGCAAAAC
 ACTGTAATGTTTTCCAAATATCCATATGTAGTACAGGCCCCAGAGAAAACAAACCACATCTATATTAAGACTGTTTTGTGTTG
 TTGTTTGACCCCCCACCCTTTAGTGTTTTTAATTACATCAATCCTGGAGAAAAATAACTGTTTTCTAATTTGGGCATTA
 CAGATTTGCTAAGGCAATAGAAAAATCTATCTTAAACCTTTAGATTTTTTAGTCTTCTAGTAAATATAAGCATATGAGTT
 CCAAGCAAATCTGAGTTTAAAAAATTTAATAAAATGACAAATGTTTTCAATAAAATTTGGAGAGGCCCATTTCTCTTG
 TACAAATATTCTAAAAATAGATGATAAAAGTTCTAAGTGCCATTTTTTGAAAGATCAGCAAAATAATTTCTACAAGTATT
 TGTGGGCATGTTATCTTTTCTATGATACTGGTTATAAACTTAAGTTATATGAAGACAGTGTGTTAGTTAAATTATGTTT
 TAGTCTTACCTTAAGGAAATAAAACAAATAAGGCTCTTAGGGCCTTTCTTCTGCACCCTGCAGTACTTGCTAACATGT
 TTTAATAACATGTAGCTGAGAATGATAAACTCTAGGCAGCAGGGTGGCTTGGAGATACTAATGGAATGCCAGTCAAA
 AAGAGCCTGGACTAGACTGAGGTCTGAAGACTCCAAATAACTTTCTGTTATCCCACCCTCTTCTCAGATGGTCCAATCA
 TGCTACACTCAGTCTAGGGCAATGACCTTGAGGAATGGTATGTTTGGCAAAAAAGAAACCAAGGAAGGCCTACTGCCATG
 CTTTAAGATTTTCCCATATATCTTTTTCAGCATCTTGAATGGGGTTTTCTGAAAGTCTGAGGAGTGAACTGTGACCAAAA
 TGGCTGATATTTTGAAGCTCAAAGAACTTAAATTTTAGGTAAGGATACTAAGACCGACTTAAAAAGTATAGTATCAAT
 AATTTACATTTCTTTAGCTAAGAATTTTCAGACCCTTCAGTGCAGATCACATTGACTGATTCTCTAAACCACTCTATG
 AAGTGGGCAAGGTGATGGTCTCATTTTCAAATGAGGATAAGTTTATTTAATTCAAGTGATTAACCTTCAAACATC
 TAGTAGAGGCTAGCCAGATGCATTTGGCTCAGATCTGTAATCTCAACACTTTGGGAGGCTGAGGCAGGCAGATCCCCTGA
 GGTGAGGAGTTCAAGACCAGCCTGGCCAAATGTTGAAAAACCATCTCTACTAAAAAATACAGAAATAGCTGGGCGATGG
 TGGTGGCAGGTGCCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAAATGGCTTGAACCCAGGAGGCAGAGGTTAC
 AGTGTGCTGAGATAACGCCACGGCACTCTAGCCTGGGTGAGAGTGATATTCATCTCAAAAAATCAAAACAAAAAATCT
 AGTAAGGGTCTATGTCTAGCGCTGCATTTCAAATATGTGTTTGTCTATGACATCATTAGCCCAATCCAATTTTCTTTCA
 TTAATTTTCTGAAATAAATATTTTTTGAGTTTATACTATATACCAGGTGCTGCTGTAAGTGCTAGGAATATAACAGTGA
 ATCAAAACAAATAAAATCTGTGACCTTTTGGAGCTTACATTCCAATGAATATAGGCAAAATAATAGCCCCTGCAAGAG
 CTCCACTGCCTAATCCCTGGACTAAATGAACATTACCTCAGATGCAAAAAAAGATTTTGCAGATTTGATTAGGGGCACA
 GACCTTGAGATGTAGTGTCCGTATTAGCCAGTGGGCCCAATCTAATCACACAAGTCTTCTAAGCAAAGACTTTTCCC
 TGGTTAGGTTAGAGAGAGATGTGATAACAGAAAAAGGGTCAGACAGATGCAACTTTGTTGGCTTTGGAAATGAAAGAAG
 GGGGCTGGAGCCAAGGAATGTGGACAGCTAGAAAAGGGCAAGGAAGCAGATTCTCCCTTAGCCCACTCAGAAAGGAATG
 CAACCTGAAGACACCTTGATTTTAGCCCATTTAGGGCCTGTGTTGGACTTCTGACCTACAGAACTATAAAATGATACAT
 TTTAATTGTTAAATCACTAAGTTTCTGATAATTTGTTACACCAGCAGCAGAAAACTACAGAAAAGATAGACAAATATTC
 AGAAAAATAAGTAAAAAATATATGTTGGATAGTGATAAGTGCTAAGGAAAAAAGTCAGGGAATGACATAGGAAGTTATC
 AGTAGGGATGCAATTTTGAATAGGGTAGCCCTCAGGTTAACAATTGTCATAGACTCAAAGGAGATGAAGGGCAAGAACA
 TTTGAGATGAAGGAAACAGGAGGCTAAAAAGCTGAGACTAGGACAATGATCAGCCTGACTAGATTCTGAATATCACCATT
 AAAAGAGCAGTTTCTACTTTCAGAATATATGTACAAGCTTACCTGGGAACCATGTGTGATGATTAAGTGAAGTTTCA
 AAACTCCACAGATGACATTCTTATTTTTCTATAAGCAAAACAGTCTTGCCCAAAATAACATCATTTACTTTTTCATGTTTG
 CTGGAGAGTTTATTAAGAAATTCATAACCCGTATTCAAAGAAAGATGAATTTCTTACAATCACTTAGAATTTGGTCTAAG
 GCAAACAATTGAGGATGTTGAGACTGAGTCTTTTTTGGACCATCTACTCAACATCATTTATCAACCAACAGCTTATACCCC

238/375

TTCAAAGGGATCTCAAATTATATTTGATCCTGAGTTGTTGCTATAATAAATTTAGAGCTGGAGAAAAATAGTCATTGTA
ATTATTTTGTATTAGAGACCGGCTTACATATGCTAAATAAATAAAAAACAAAATGAGAGTTAATTCTATGTGAAATTCA
CCATCAATTTTGTATGAAATTTCTATTGATACCTTCCAAGTACAGTAGGCCCTTTCGTATCCATGGGTTCCACATCTGTGT
ATTCAATCCAATTTTTTTTTTAAATAATATGGTTGTGTATATACTGAACATGTACAGACTTTTCTTGTCAATCCCTAAA
CAGTACAGCATAATAACTATTGACATAACATTTACATTGTATTAGGTATAAGTAATCTGGAGATGCTTTAAAGTATATT
GATGTGTGTAGGTTATATACAAATACTATGTCAATTTATATAAGGAACCTTGAGCATCCATGGATTTTGGTATCTGCCTG
AAGACCTGGAACCAATCCCCAAGATCCTGAGGGACCCTGTAATCTAATTGAGGCCAAGTTTCATGGGTTTGTATCCT
CTTAAGTACCTGGGGGAAAAAAGTCTGATTTTTTTTTTAAGTTTGTATACCATATATTTTAATTTCAAAGAAAGG
AAAACAGAAATTTTATGATCTGTGTCAATAGAAAGTGTTAATATATAAAGCAAAGAAATGCCTAGGTGAATATTGGCCTA
GTAATAAACATTCTGCAATGGTGTCTCATGGGAAATACGCCCTTACCTTGCTACTCAAATGTGATCCATGAACCAGCAG
TATGAATATCACCTGGACTTGGTAGAAATCTTGGACCCACCCTGACCTAGTGGGTAACCATCTGCATTGTCAGTAAGA
TCCAGGTGATTATATGTGTTTTCAATGTGAGAAGCACAGCAGTGGGGCCTTACCCGGGGCCCTCCTTAGGAAACACA
CCAAGTATTGCATGTTTTTACATCCTGACAGGTCCATATGAACCTCACATTTTCCGAATACAGTGCATAGCATATCT
ATCATATTTTGAAGAGCTATTTTCATCAAGGGAGCTTAGTATCTGGTGTCTACGAGATACCTACAGAGAAGTAGACAGT
GTTATGCTTTTGAAGATTTATCAAACCTTTTGGTCAATATAATGTTTTTATTTCAAACCTTAAATTGGTCAACATATTT
TTAAATATTTAATAGTTGAGGGATGAAGAGGATAGAAGTTTAAATTAGTTCAAAGGAAGGTAAATTGGGAAGGAAACAAA
CTTTTTTGTGTAATCAGAATTTTCAGGATGAAAAAAGACACCAGTGCCCTGTGGTTCAGTGTACACAGCTATGATGT
GACTCTTCAAAGGTCAATGCTTGTGCCCTATTGCTGCACATCCTTCTCCTTGTGATGTTGATGTGCTATTGGCTGGC
TCTGTGTCAATGGCTTGGTCTTGTCTTCACTGAACCTTGGCCTCCGTGAACTTCTAAGTAGCATTGCTCCTACCTGTG
AATCTTGGAAACACACAGGGCAAGTGAAATTCATTTTCTCCTTCTTCTTTTAAATGATTAAATAGACAATTTAT
TTAAGCAAGATCCTTATAGTCATCRTTGCAGACTTAATATGAGATGTTAAATGTTCCATCCAATTTTCTTCTCTGGAT
AAGTTTTTCTTCTATCCCTGTGAGTTTGAAGACATAATACCAGAAGAAGAGGGGCCAATTCACACAGAGCTCCC
AAGAGTGAGTTTAGGAGTGAGTCTGAAATTAGAATAGACATTTGCTGATCTTGCATAGGTCCAACGAATTAAGGCAAG
ATCTTCGATGAGCCCTTGGTGGTTAGAGTTGGTTGTTGACTGAAGCAGGTACTCTTGTTCAGCTGGGCTCTTATGGC
CAACCGTTTCACTTGCATCTGCCAGCCTTCCAGAGATATGTCATATTTGGCTGAGTCGAGGGTCAAGGGCAGAGTGGCC
AGGTGCGATGGAGTAAACTTTGGGAATGACATTTTGGTGACCCAGCACACAACAGCTGAAATTCATTTTCACTGTGAC
ACTTTTGTATCTGTAACCATCAGGTCTGTTCCCTATGTTTTCTATTCCTTAACTTGGCTACCATTATACCATCACATCT
CTTTCCTTTCTAGTGAATCCCATTAGACTAGCTCCTATCTCATAACCTCCTTTTGTAAATTAATGGCCCAAAGATTA
GCAATTCAGAAATTCCTAAAGTAATCCAATTAGCTCAGAACATCATAGAGACTTTTTTTTTTCTTGTGCTCATCCTG
GGTTATTTATCAATGAAAGTGACTTTAGATTAGATAGACATGCTGCCACATCGTATCGTTGTGACATCCTGCATCT
AATAAAGGGCTTGACTTAGGCACCATCTCCTTCTCTCTTGGCAGCTGCTCAGTTAGATGTTTTTGTGTTTTAACC
GGCAGGACTTCAAATGTGACCTTATTTAACTCCATCTGGTTATATTTTGAACCTTATGCTCTTTTTATATCCTGATTCTG
TCATCCATTCTCTTAGCTGTCTTCCCAGCTTGATGTAATAGTATTTTCCCAAACCTACACCTTTTCCATAATAAGAT
TGTCACCTCTCCCTCAAGCTTCTTAAAGCAAGCTTTATCATATGTCTGATAGGATCTCTGTTTCTGATTGTACTCAGTA
TAGATTTGTTTCTGGCACACATGTATGCACTATGTCACTTAATCACAGTGCCCTTATTAGATTACAACTCCTGTAC
CAAGGGTTTTGTTCCCTCTTTCAAAGCAGAACTTAAAGAAATTTTGTCTTACCTTTAAGCGTGCAGTTCACATCATTGA
CTTTAACTGGATGGTGGTTGATGGCTGATGGTCAACTAACAAAAAAGGAGTTGAGGAGTTGAGGTTTTCAGATATAACAG
AAGGATACTTAAGACTTTTAAAGGAATAAAAACTAAATTTTCTTAGCACAATGGTTTCAGATGAAAGTAAGGGTGCATCA
GAGAAGGCTGTCAATGGTTTATTTGTTATATTCCTAGCTCATGGTGATTGTATGTTAGCCAAATATCTTGCATTTGATT
TTAAACAAATCAGAAGTAGATGACTCAGAAATGTTGACAAATAAAATTATGGACAAGCCCTTGTCTACAGCAGCTCTTA
TTAATTAAATATCTGAGACAGCAGAAATTAAGAGAGAAGAAAGTGATATACAATTTGGAAGGTTTGGAAAGCTGGCCATA
AAATTATTTCTTTCACTGAGGATACCTTACCTACTTATAATATATAAAATTTTGAAGAAATAAGAAATAGGTCTTATT
TTACTTTGCAGTGAAGGCTTGAAATATTTGAAAGTTCACTTTATTGCAATAGGATTAAGTACATCAAACCTTCATCCATT
CTTATCTCTCTCAAATATTAGGAGTATAACTTTCAACTGAACCTTCTTGGCTGCTGTAATATACTGTCTTATAGTGATA
TTTTAAATGAATACTTTGTGAACATAGTACTAGAAAAAGGATAGTGTGTTTGAATATTTAATAGCCTTACAGGGTTAA
AAAAGGATCTTATAAAAAGTATGTTTAGTACCATTCAATTTTACAAATTTATGCATTTGCTTATTATATATGTAAT
TTAAATTTACATATAAGCTTATACTCAGAAAAAGATAAATGTTGTAACACACACTTGCAATGCACACACACACCATAACA
ACCACCATGCCATTGAGTGGTTATTTTCAAGGTAAGTAGGATTTGCAGAAACTTTTACATATTTTACGTTTTGCTTATATTT
TCTGTTATAAGCTTTTATTTTGGCATGAGAAGAAAAAATTTTAAATTTTCCCAAAAACATTTCTTTGTAATAGTCAAAA
ATTAAGTGAACAGTGCTATCAATAGGAGAATGGCTACACCAACAAAAAAGTCAAGTAAGAAATAAAATTTGGCCAGG
CCTGGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGCTGGTGGATTGCTTGAGCCAGGAGTTTGAAGCC
AGCCTGGGCAATATGGCAAAAACACCATATGTACAAAAAATACAAAAAATAGCCAGCATGGTGGCATGCACATGTAG
TCCTAGCTACTAGGGTGGCTGAGGTGGGAGGATTGCTTGAGCCTGAGAGGCAGAGGTTGCTGTGAGCCGAGATCACGCC
ACTGCATTCTAGCCAGGGAGATAGAACAAGACCCTGTCTCAAAAAAATAAAATTAAGCAATGGGAAAAGATTCTCTTG
CTATTTTAAATGTTGATCAACATTCAAATTTTCACTGGTTTTAGGTAAACAAGACATGTCAACCTCCTGAAACAGTAATT
GTTGTAGATAATAAGAAATATATAGTGTGCTTTTACCTGATTTTAAAGTGAGAGAAAAGCTGAATTTGAAGCAAGC
ATACAATATTTTCTAAACATATCCTCTCCAGTTTCACTGTTTTTAAATCAAACCACCAGGAATGGTGCAGCAGACAAT
GCCAGTCCATGTCTCCCCCTTCATGGTCCCTTAGTTGTCAATTAAGGTGACTGCAGAGAACCATAGGCATTTGAGGAC
TTAACAGAGATATGTTTATATTTGAGAGTGGACATAAGCTCCTCATTGCCCTCATTGTGGTTTGCATTTCAAACCTGCAGC
GTGTAATTTTCTAAGCTCTGTGGTCTGCCCTTCTAGGACTGCTTGCCCTGTACTGTTATTTTCAAGATGTTTATCTAGT

239/375

GAGGAGTGCTGCATTGCTCCATTGTGCATCACAGGGCACAGGAAGCAATGGTATGACATTTTGTCTGCACATCTATTTT
TGATTATTCTCAAAAGATGAAAATGTTTATCACTGCAGGGGTGATTAGTCCATTTTCATGCTGCTATATAAGAACTACT
TGAGATATGGTAATTTATAAAGGAAACAGGTTTTCATTGACTCACAGTTCTGCATGACTGGAAAGGCTTCAGGAACTTA
AAATCATGGTGGAATGGGAAACAAACACGTTCTTATTTCACATGGCGGCAGGGGAGGGAAGTGCAGAGGAAAGGGGAA
AAGCCCCTTATAGAATATCAGATCTCCTGAGAAGTCACTCACTATCATGAGAACAGCAGGGGGATCTGCTCCCATGAT
CTAATCACCTCCCATGAGGTTCCCTCCCCAAAACATGGGGATTACAATTTGGATTACAATTCGAGATTTGGGTGAGGA
CACAGAGCCAGACCATATCATTCCACCTTTTGCCCTCCAAAATCTCATCTTTCTCACATTTCAAAACACAATTATGCCCT
TCCCAAGAGTCTCCCAAAGTCTTGACTCATTTACGCGTTAACTCAATAGTCCAAGTCCAAAGTCTCGACTGAGACAAGG
CAAGTCCCTTCTGTCTATGAGCCTGTAAAAGCAAAGCAAGTTAATTACTTCTAGATACAGTGGAGGCACAGGTATTG
GGTAAATACACTCATTCCAAATGGGAGAAATGTCCAGAACAAAGGGGCAACAGGCCCATGCAAGTCCAAAATCCAAAT
AGGGCAGTCATTAAACATTAAAGTTCCAAATGATCTCCTTTGACTCCATGTCTTACATCCAGTTTCATGCTGTTGCAAG
AGTTGGGTCCCCACCATTGTTGGCAGCTCCACCCCTGTGGTTTTCAGGGTACAGTCCCCCTCCTGGCTGCTTTCATGGGC
TGGCATTGAGTGTCTGCAGCTTTTCCAGGTGCGCAGTGAAGCTGTTGGTGGAGCTACCATTCTGGGGTCTGGAGGATG
GTTGCCCTCTTCTCACAGCTCCACTATGCAGTGCCCCAGTGGGAATTCTGTGTGGGAGCTTGACCCCAATTTTCCTA
CTGCACTGCCCCAGCAGAGGTTCTCCACGAGGGCCCCGTCTCTGCAGCAGGCTCTTGCTGGACATCCAGGCATTTCCA
TACATCCTCTGAAATCTAGGTGGAGGTTCCCAAACCTCAGTTCTTGACTTCTGTGCACCTGCAGGCCCAACACCACGTG
TAAGCTGCTAAGCCTTGAGGCTTGACCTTCTGAAGCAATGGCCTGAGCTGTATGTTGGCCCCCTTTAGCCATGGTTGG
GACTGAAGCAGCTGGGATGCAGGGTTGCACAGAGCAGGGGGACCTAGGCCCAACCAAAATAAAGTCTTCTCCTCCT
AGGCCCTCCAGGCCCTGTAATAGGAGGGGCTGCTGTGAAGTCGTCTAACAGGCTCTAGAGACATTTTCTCATTGTCTTGG
TGATTAACATTTGGCATCTCATTACTTATGCAATTTCTGCAGCTGGCTGGAATTTTCCCCAGAAAATGGGTTTTTCT
TTGCTATTACATCATCAGGCTGCAATTTCTCAAACCTTTATGGTGTGCTTCTTTTGAATTTCTTCCACCAGATACT
CTAAATCATCTCTCTAATTCACAGTTCCACAGATCTCTACGGCAGGGACAAAATGCCACCAGCCTCTTTGCTAAAGCAT
AGCAAGAGTGACCTTTACTCCAGTTTCTAACAAGTTTCTCATCTCCATCTCAGACCAACTCAGCCTGGACGTCATTGTT
CGTATCACTATAAGCATTTTGGTCAAAGCCATTCAACAAGTTTCTCAGACGTCCCAAACCTTTCCACATCTTCTGTCT
TCTGAGCCCTCCAAGTCTCTAGGAAGTTGCACATTTTCCACATTTTCTGTCTTCTCTGAGGCCTCCAACTGTTCC
AACCTCTGCCTGTTACCCAGTTCCAAAGTCGCTTCCACATTTTTCAGGTATCTGCAGTAGTGCCACACTACTCTCAGTAC
CAACTGACTGTACTAATCTGTTCTCACACTGCTATAAAGAAGTGCCTGAGACTGGGTAATTTGTAAAGGAAACGGGTTT
AATTGACTTACAGTTCCACATGACTGGGGAGGCTTCAGGAACCTTACAAACATGGTGGAAAGGGAACAAACATGTTCT
TCTTACATGGCAGGAGAGAGAGTGCAGAGTGGAGGGGAAAAGCCCTTATAAAACCTTAGAGCTCCAGAGAA
GTCACTCACTATTATTAGAAGCAGCATGGGGGAATCTGTTTCCATGATCTAATCACCTCCCATGAGGACTTTCCCCCAAAA
CGTGGGGATTACAATTTGCATTACAATTCAAGTTGAGATTTGGTTGAGGACACAGAACCAGACCATATCAAAGAGTTTG
CTTTGACAAAAGGAAGTGTATCTTTTTATTACTTATTTACAAAGCAGCTTATTAAAGTTATTAAATAGTTTCAAAGG
GGCAGCTTTTTTTTCTACTTTCTGTATTAGTAAGCAACCATCTATGATTGTAATACAACCTGAGGTCTCCCAAGAGAGAA
TGTAGCACAAAACAAGGTGTGCTATCTAAACCTGTAAAGAAATGTTGTGCAGTGAACCACTCCAGCACAGATATGGAGC
TCTCTCAGAAACAACATAGGAAATTTAGATATGTGAAATTCAAATAGAAATAGAAAACCTCAATTTAGAGTTTAGTTTGC
GTAATATCTTAGAAATGTTTTCATGGTTCAAAGCTGATATTTGACAATTGTGTTAGATCTATAAAAATTCACAAAACAT
CCCTATAATTTTTCAGATACAAAATGCTAATAAGGATTTTAAAGTTCAATGTGGACCACAGGGCTTCTGCTTTTGCAGGT
GTACCTTCATTTACATCCTTTTCAGTTGAGGAAGGGTGGGTGTTGAGAGCAAAATGTATGTATAAGGTAAGAAAGAAAG
AGAAATGAGAGAGAGAAGCAGAAGATAGTGAGCCATCAATAATGATATTAGTTGGCATTCATTTCAAAAAGCCAACCACC
CCAATTTAGAGGATTTGCATTTAGGACTAATTAAATTTATAAGCTAATTGAGCAGGGACTGAGTTAAGCCTACTGATAGT
GCTTCATAAATATTATATTAACAATAATACAAGATGTTCTTTTCAAGGCTAAAAACTTTTTCTAAATGGTGATACAA
ACTTGTGAGTCTTGGTAAGTCAATGTTGTTGCATTCCTGAATTTTCTATCCCTTTTAAAGGATAATTTCTAACTCAAGTG
AACCAGAAATTTTCCCTGTAGCAGTAGAGGTCTCTGAAAATTGAGGAAGCTCTCCATGTGTAATGCTCTGAAAATGGCA
GACATTTTCAGAGTCACATTCTGTATATCATTCATGTGAAATGGCATAGGCAATTTTACTCCTCAAGATTTCTTGGCCAG
AATTGCAATTTAATAAGAACAAGTATTATGAATTTGTTGAAGATTCTTCCAGCTCTCTTGGAAATAAAGGGTCTTCTCA
AATTTGTAGCTTTGGTACATTAATAGTTACTCTGGGGGCCCTAAATGAGTTAGTTAATGTGCAGCTTAAACATCTGAGGCA
CACCCAGAAGTAACCTCAGGACTGAGGAATTCACCTTCCCTTGTCTACTCAATTGCCGTTTGTGTAAAATAGTGGACAGTG
ACACTGTTTGTGTGCAGCTAGCAACTGTCTCTAAGTCTTGGGTTTGTGTTGGAGCATAAAGTGCACTCCAGTGCCCTGAGT
ATACCTGTAAGGGTATTTACCATGATTCATAAGACTTGTTTTTAAAATTCCTCTCCAAATAAAACCCCTCTTAAATTTAA
TTTTCTCATATTTCTATGTGGTTATTTATAGTTCAAGAAACAAGTATTTAAAATATTTAAATGATAGCCATTCAATTA
CTATTCCAAATTTTAGTTTTTTTCCCAAGGAGCTGAGCTGATTATCAAATATGCTTTATGTGAACTCTGTTTTGTTTA
AAGTGTACTGTATTTTTTAAATTTGTGAACATGGGAAATTATACAATGTTCTATAATAATTTCAAACCTGAGTTTTTTT
TAAATCTCAATGAAAGCTGTACCTTATCTGAAATGTAAATTAGTGTA AAAACCCCTTTCATTCTCAATAAATGTGCGCTA
CTATCTTTTTTATCTTCATGTTCAATAGTAAACATTCAACCTTCAACGGTTAACAATAATTAAAGTGTTTACCATGTA
CCAGACACTTTTCTACATTTCTGGGGTGACAGATCTAGAATTACAAGTGTATCAAATATTATAACAGACAGGTGGAAGGT
GCTACAGGATCAAATAAGAAGAGGACATAAACTTAACTGTAGAGATGGGTGGGGAGGGAGGAAGAAGTTAGTGTTAGA
ACAGGCAACTTTTAAAGAATTAACCAGGAAGTTATGCAATTTGGGGTAAAGTGGGGAAAGAGTGTGAGGAAATGAGGT
TGAAACAGATAATATAAGATTTGCTATTTATTTCAAAAATAGTTTAAAGGCCAGTAATTGGCTGGGAGAAAGAAATGGTGCA
CAGATGGGCAAGTGTTGACCTGCAAGGCCAATTAGAAAAGCTGTGTCTATAAGTAAAGGCAAGAGATGAGGATGACCTGG
ATTAGGAAAACAAAAAATCCTCTCTTTTACCTGCAAAAATAGCTGTTGACTTTGTCTCCCTTCCATACAAGACTTGGGG

240/375

TCTCCACGTTTCCAGCAAGAGACTGGGCAGTTATACATCTGTTTTATTTTTACTCTGACCTGACTGCTTTATGCAAGA
TGGGCCAAGTCTCCCTTATACATCAGGAATGCACTGATGTAAAGACAAGATATCTGCTCCTCCAGCCACCTTTCTTCCA
GGTCTATCTGCCTTAATTCCTCTTCCCCATTCTCAGTGGTGCATCATTCTCTACTGCTGTCTAGTCTCTGCCTCAGTT
TTCCATTAGTTTTATTTTGCAGCAGAGATTTTTTTTTTTTAGTGATCTCCTATTGTTTCTTAATCACCTTGAATA
TACCTAATTAACCCAAGTAAACCTTCATGATGTCATGTCTCTTCATCCTAGGAGTATAAATGATCCTTGTATATCTATAG
GAACGTTTCTATTCCAGTCTTTGAAATTGAGGAATTTCAATACATTATATATATATATACACACATACAGACACACAC
ACAACGTGTATATATGTGTATATATGTGTATATATGTATATGTGTGTGTATGTGTGCATATACATATTCCATTAGTT
ATGAACAGCTCTTTTTTATCTCTTAAAGCAGCAAAATAAAATATTGACATTATTCAGTGAATTGATAGTTGAAATGTA
AGGATTTTCAGAATGAAAGTTATGTAGTAAATCCTAGCCCTTTCCGAATCCTGATTTTCTAAATCTAACCTATATGGAAT
TTCTTTTTTTTTTAATAAAGGTTCCATGAACTTGGCCTCTTTCTATCATCTTAAATCGTTCTCTCTTATACTTCTC
TTAGTTCTACTTCTTTCACGTGAAATCCATTCTAATGTGAACCTCGGTTTCTCTGAGAGGTGCCTCACCACAATGCCCA
TGCCTTTCTGCACTTCCCACGTAGATCTTCTTGCCCCAAATACCTACTGTGAGCCTTCTTTCTCTGTGCCTTTTATTA
TTCCACTCATCTGAAATTCAGTCGCACCAACTTTTTAAGCACCTTTATCAGGCACTGTGGTCAGTAAGGTTTACAGATG
AATAAGGCATGATTGCCAGTCACTGACAACAAATTTGGGGCAGGGAGAACAGCCCCATCCCCATAAATGGTCTCATGTT
TCTTTTGTGTTGTTGTTTGTGTTTGTATAGAATCTCACTCTGTTGCCAGGCTGGAGTGCAGTGGTGTGATCTTGGCTCAC
CATAACCTCTGCCCTCCAGGTTCAAGCAATCTCCTGCCCTTAGCCTTCAAGTAGCTGGGACTACAGGTGCTGGCCACC
ACACCCAGCTAATTTTTTTGTATTATGAGTAGAGATGAGGTTTACCATGTTGGCCAGGCTGGTCTCAAACCTCCTGACCT
CAAGTGATCCCCCACCTCAGCCTCCAAAAAGCTGGGATTACAGGTGTGAGGTACCGTGTCTGCCCATAAACAGCCT
CATTTATAAACCATAAATACATAAGTGCTGAGATAGAGATTTGTGTGTGTGTGTGTGTATTGGGGGGTGGTGGATACA
CTTTGCCCAACAAATCCAATATTGTTTACTACTTCTGTGCTTCCCACATGACTGTTCTCTCATCTTTCTCTTAAATTA
ATGGAAATACCTCCTAACCAAGTTTCCGACTGGTGCCTTTTGCCCATCCAGTCTAATCTCATAGCAGAGTTATTCTACA
AAAACAGTAATTAGTTCACATCGTGTGCTCTCTGCTCAAAGCCATCCAATGGCATGCCATCTAGAGTCAAAGTCAAAT
TCTTGCTATGTCTGTAAACTTCTACATGATCTATGTCTACCGCCCCCTTCAAGTGACCTGGATCTGACATCTTCTCAA
ACCAGTGTCCGCTCACCACCTCACTTCTCCACTCTGACTTCACTGGTGTTCCTGAATGTGCCAAGCATGTTCTGCAT
CACAGCCTTTGCACTACCTGTTCCTCCAGTGCCTGGGAATCTCTTCTCTAAGTATCTGGATGGCTGGTTCATCCTGCC
TTCAGATCATCGCTCATATGTTACTTTAGCAGTAATCCTTTCTTCTATGCTTTTTCTTCCACCTTGACGTTCCCTGC
TGTATTTTTATTTCATAGCACCTATGACCTACTGTATCCCTTGTGTTATCTGTTTATTGACTGCTTTTCTTCCACCTTGACGTTCCCTGC
TAAGCTCTATAAGGGCAAGGGCTTTTTCTGTTTTTTCACTGTTGTATCCTCTGTGCCTAGAAATGGTACCTGTGCATATA
ATAGGTGCTCAATGAATATTGCTAAAGGATGGAAGGAAGAAGGGAAGAGGAGGAAGGAGGAGAGAGAGAAAGAGGAA
AGTTGAAAGAAGAAAGGAAGGGAAGAAAGATGGTAGGGAAGAAGGAAGGACAGCAGAAAGTCTCATGTTGGCTTTACTA
AGTCTCTAACACTTATTAACACCTGCTTGTCTTATAAACAGAGATAACACCGGCTGTAGCCTAGTGCCTTTTGAAGG
CAACATTATCTGGATAGAACTAATAAGGTTGTCTGTTTATGCTGCATTTATGGCAAGAGTTACTGACTTTCCATTTA
TAGTTGTGATATAAAGTTTCTTCTTAAATGAAGACATTTTATTTTCACTTTTAAAAAACTAGTCTATTACAGAATTTT
TAAATTAATAATAGTATATAGGGGATGCAGAAACAACAAAAATCATGATGTAGAAATGTGGATATGGCAGAATCATGA
AGCTGGTAGTGAATGCCTGAATTGGGGATAAGTGACCCCTTCAGCCATGAAACATTCCCTGACTATTGCCATCTTCCC
CTCTTTTATTCTGTTGTTTATTTCGACTCCTGTACACTATCATGGGTTGAAGTGAACCATTTGGTATTGCTCACTGTT
GTTTTGGGTGTTTTAGTTCTATCTTCTAAATGATATAAGATCCTTGATGTGAGTGCCTCATGTCTGCCCCCTCCTC
CTGGGCAGCCACCATAGTGCACAGCCCAGCACTGACAAAAACAGAACATTAAGGATGTTTGTGTTGTATTTCATCATGA
CTCAGCTACACAATAAGACATGAGGTAAATAGTGTGCAGACAGTAAAAATACTCGAGCGTGCTTTATTTTTTTTTTA
GCAAAAGAAATACAATAGCAAAACATCATTTTGCCTTGCAAACTGGCAAAATGAAATCACTATTTTTTGCCACTGGTGTAA
ATTTTATAACACACACACACACACACACACAAACACACAAGTACATACATATACTTATTCAATCTGGTAGGA
TAAATTAATCACTAGGACAAACCATGAGTTAATAGGAGCCAAATTCAGCACATCCAATTGGAATGCTTGAGAATTAA
ACCTGCTAAAAATACTGACTGGAATAGGAAGACATTTATATAAAGCATTAAGGCATTTTGTAGTGAAGTCAGCAACA
AATAATTAATTGATTTAACTAATAAATTTAGATATTTAAATGTCAAGGAATCTTTGTTCTTCTGTTTTATAAATGGT
ATTAGCATTATCTTTTTTACTGGAACCTTTAAAGGTGTAAAATACTGTCAAGAGCAAAAGCAACTTAGATTGCCTGTAA
TGACCATTACATTGACACCATTTTTTGCAGTATGATTTGCTATTAAATGTGAATAACGTGAAGAACAATAACACCTCTA
GATCACCTGCTATGAACCAGGCACTGCTCTAAATAGCTCAGGTATTTTAACTCATGTAAGTGTACAAACCTATGAAAT
ATATCCTCCTTTTCACTTCACTTTTACTAGTGAGGAAACCAAGCTCAATGAGGCTCTGTTAAGTTACCCAGGTACACAC
AGCTAGTAAGTGTCTGAGCTGGGTGTTAGTGCACAGTGTCTAGCACCCAGTCCATATACTTAAACACTACCTTTGAA
TGCTGCTCTGTACCCTATATAAGGAAGCTGTGGCCCAATAGGCAACCTGTGACAAACGAATCCTAGAGTCTAAAAA
AAGGTTGAAAGGTGACTGTAAAGTAGGCATTTGATCTTTAAAAACCAGGTGAATTTGACCTGCCATTCTTGACGGCAT
TAGTAAACATTACATTTCTTATAATTTACATTAAAAATCTAATACTTCGTTTACAAAAAAGACTTTCAAAGAATATGC
ATGCATTTTATGCAAGGTTAAAGAAGTTTTTCACTGCTGGCTAGTGAAATGGGGGTTAGATGCCCTGTCTATACTACATG
TTTAATCAATGTAATCTTAAATGAGATGACCTTGTAGCCAAGCATTTTTTCTTTCTTTTATAAGCAATATTAACATA
TTAAATCAAGAAAGCTAATAGTTTTTTCGTATTTCTCAATAACCATTAAAGTTCAAACATTGGAAGAGTTTAAATTTTAC
ATGAAAAATCCACAGGCAATAATTTTAAAGTGACTTAGAAAAATATTTACCGTATTTTAACTTAAATGACTGTGTATGTG
TGTGTGTGTGCCTATGTGTGTGCCTATGTATGTGTATGTATGTTTATAATCTAGTAGTTCTCAAGGAGTATTGGAGAAA
GAATATGTGATCACATGTAGTTTATAAAGCTCTCGTGTTTTTTGAAAGACAAATTTTTTGTCAATCTAGTGGTAACAT
GATACTAATTTTTTAATTAATTTTAAATTTCCCTGATAATAACATTTAAGCCTTAAAAATATTGTTAGTGATTCATGTTT
TTTTTCTATAAAAAATTATTTCTAAGCCTTCTCAAATTTCTTCCAGACTCTTTTTTCTGATTGATTTTAAAGAATTTTA

241/375

AAAATATTCTGCAATTTCTCTTGATCACAACAAGTGTGGAAATATCTTCTCCCGAAGAAAAGAATGATTCCTTAAAAAA
ATACTTTAGTAGCAGTTTTTTTCTATGAAAAAATTAGAAGTAGCTTTTTCTTGGCAGCGTTTTCTTCTAGAGCAATAGG
GAGGAAAACAGAAAGCTGTAGACTGTTATCTTCGTCCATACATATGTTAGTGCTGGAACCTCAACTCCAAAAACTTTGTT
CCTTTGAAAATCATATCCCTCCAGAATTGGTGGAGTGGTGATGGTGTGGTGTGAAGGCCTATTGCCAGGACTGAGAAG
GAAAAGCTAAAGAAAGAGGGAAAAAAATCCAGAGAAAGTGAAGTGCCTGGGGAGGAGGGATAGGCAAGAGACCAACAT
CGATTCTAAAGGAATCTTGCAAATGCTCTGGCAAGTCTATGTATGGGAACATCATTTGCCTAGAAGATGCTCCCTTTT
ACTCCCTTTTTCCCTATTGGGCTGGTTTAGAGGTCAATAAACTTAATTATTTTACATCTAGTAATGTCCAGATGATAT
AAAATGTCAATGTTTTTCATTCTATCATATAGTTTCATGAATCACAGTTAAATAATGTTCCTTCTAAAAATTTTTCAA
GTTTTTTATTTTACCCTAAAGTTCTTTTACATATGGAATTGAATTCTGTGTGCAGTGTGAGAAGAAAATCCACTTTTTGT
TGTTTTCCCATATGGCTAACTAGTTATTTTCCACACCATCGATTGACTGATCCATCATTTTTTCCACTGACTGGTAGTGTTA
CCTTTGACACGCATCAGTACAGTTGGTCTGCTTTTACCTTTCTAGCTATAATTGTGGCGTATCCCTCTATTAAATTGCCTC
CTTTAGTGTTATTTCAGTGCATTTTATACATTTTGTGTACGAAGATCTTATACATTTTTTTATTCACATCCACTGTAGACTT
CTGTTGCTATTACAAAATGGCAACAATTTTCAAGTTATTTTTCCAAATGCTTGCTGCAGCTATATCCAAATCTAATAAT
TTTTATATCGAACAATATTTAGAACTTTTTCAAATTTGATGTACTTTTAAATGATGTTTCTTCTGATTCTTTTTAGGTA
TTCTTTGTAGACAATCGTATCATCTGTGAATAACAAAAATTTGTTTCTTCCATTCCAATTTTTTATACTCTATATTTTAT
ACCACTTTTTTAAATGATTTATTGACTGGCTGCACGGATGCTTCTCTGACTTTAAATATGAATCCCTGAGGGATCCTT
TTAAAGGAAGATCTTGGTTTCACTGGTAGGTCAGGCACTGAGAACCTGCATTTCTAACAAGCTCCAGGTGACAGTGAG
GACACTTGTCCAAAAAAGCAATGCTTTCAAAGACTGTTAAATAGAAATGGAGAGAACAGCATTCCTTACTTTGTGTC
TACAATTAAAGAGCATGCTTCCACATTTTACCATCAAGATTAGATATCTTTGATTAGTTTTGGTAACTTCCTCCTATTTC
CAAATTTGCCATACATTTTTTATCGTGAATGGTTGTTTAGTTGAATAATTTTCTGTGGTTTTTCCCTTTAATCTCTTAA
CATTGTGAATTATTAGAATCTCATGTTTAAAGCCTTTTCATGCCATATGCACACAAATATACATACACATATAGGTAC
ATAGAAAAATATGATTTATTGCTGCTTTATTTGCTAACATTTGGTTTAGACTTTTTTAACTGTCTTTATGATTTCAGAT
TGGCTTCATGTAATCCTTGAGGATCTTAATGTTTTTAAAGTTTCATTATAGAATGAATTAGGTGTATACCTCTTTATTC
TAAGCTCTTTACATGGAACCTACTTTTATACTAGTTTTTGAACACACTCTGTTATAATCAGCATCTTACTGATGAAGA
AACAGAGGTACATGGAGGTTAAATACTAGCCCAAAGTCACATAGCTAGTAAGTGATAAAATTCGTTGGTTTTTGTCTG
TTGAACAATGAGAGAAATGGTTTTCTAAATTTGTTTTGTTTAGTCACTGATTCAATCTTAAATGTAATTC
AGTAGTTCACTGATAGAAACAGTTTTCAAAGCCACTAAAAACAGATTAGATCCTAGTGAGGTAAAAATAAATAA
ATAAAATGATTTTTGAGGCCACTGAGAAAAAGTGGGGCCCTAGTAATTTGTAAACAGCCTCCCACTCCCTATCAAGAGGAG
GTGGTAGACCGAGATTCTAAATTTGAAAAATGAAGGCCGGGTGCGGTGGCTCACGCCTGTAATCCCAGTGCTTTGGGAGG
CCGAGGCCGGGTGGATCACAATAATCAGGAGATCGAGACCATCCTGGCTAACACGGTGAAACCTGTCTCTACTAAAAATA
CGAAAAATTAGCTGGGCGTGGTGGCGGGCGCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATGGTGTGAAC
CCGGGAGGCCGAGCATGCAGTGAGCCGAGATCGCACCCTGCCTCCAGCCTGAGCGACAGAGCAAGACTCTGTCTCAA
AAAAAAGAAAAAGAAAAATGTAAACACTTACCTTTGGCTTTGTCACTTAATGGCCTATGTCAAAGCTTAAATTTGCTTC
ATGATTTTCAATTTAAAGTGATACCTTTCACTGAATTTCTGCAGTGATTAGCATAATTCATAATAGGTATATGCCTATC
ATTTTCATAACCTTTTCAGGAAATCATTTGGCCCTAGTATACCTGACTTTTCTGCTCTAAGTTTTCCTTTTATACCTGAATCTC
AATCTCTCTTACTGAGATTTAAACCTGTATCTTTACAGCGAACTTCAGAAACATGGGAAAGACTGTCAATATCCTTCAT
GAAATCCTGTGGTCCACAATGAAGCGTGTATTTTGTATACCCTCAATGTAAGACATTTTACTTTTAAATTTCAAAGA
GATTTTTTTTTTCTATGCTACGTAGATATTAGGGTACAGAAGAAAAATACAGGAGACATTAGCCTGCTCATGAAGGTTATG
AACTGCACAAATCATGTAGTCTTTTACAGGTTTAAATTTGCCTCATTTGTGAAAGGAGGTTGAAGTAGGCAGTCTCTCACC
TCTCTGTGAGCTCTGATGTTAAAGGATTTTGTTCATCCTTACAATGTTTTTCTCATTAAAGCTCAAATATGCATAATTAA
TGTAATGCATTATTTTTTAGGAGATTGAAAACCTATCATCTAGATGATGTGCTAACCTGATTTTGTCAATATCATCTCT
TGATTCTGTTTTTATATCTCAATATGATACAGAGTTGCAAAATATTTCTAAGCTTTTGATCATTTTGGGCATATTC
TGATAGATAATTTGAAATGATATATTTAGTGAGAAAAATGTAAAAATAATTAATAATCCTTCTAAGAAAAAACAATATG
ATTAATAATTAATAAGCTGCAGTGTAAACCAATATTTCACTATTCAATCATTTGATTACCAAAAAAGATAGCGGCATGAAAA
ACCTCTATATTTTTTATCTCATGTTTAAAGATGAATATTTTGCCCTTCATATTTATCATTTTTTAAAAAAGAACACATTT
AGACTTTTAAAAACGATATGTAATGTGCTTCTACATTAATGGGAAAAACAACCTAAACTGTATAGTCAAATAAAATATTG
GAATCTTATACCTTGACATATTTTTTTAACTAGACATCATCTAATTTCTTTTCAAAAAATAGAAATAACTTTTTATCTT
TGTCCTTGGTATTACTTTTATACTTGTCTGTTTCACTGGCATTGCTATTCTGTGATAAGATTTTATTACAGAAAAATGTCTC
TATCTGTACTTGAACATTAGTCTAATTTTTTTTACAAATGTTTCTTGTATTGACATCTGTCAACTGATTTCTGAGTTAA
TATTATCTTTTCACTTTCCATTCTTTGAAAATAGGAAATCCAATATTAACCCCTTCAATAAAGATGAACCTTACATCTG
TATATCCAGAATTTTGGTTTGATAAAACCAAACTGATAAGTTCAATGGGGTTAAACATCTTGAAGTAAATTTGGAGA
GACATTTGAACACCTTTACCCCAAGTTCAATCTATCTATCTCTCTTTAATTAAGTCTGTTTGAAGTAAATTTGGAGA
TTGATTGTTAGCTTCTGGAATATGTCCTAAATATCATTAAGGCATATGGAGCTCCATGACTCCTCAGAAAAAGAGCACGT
TGATTGATCAGTGATTTGCAATTAGACATGCGTCTACAAGTTTGATTGACTGACCCAGAGAGGAATATAACCTTAAT
GGAAACAGAGAAAAATATCTTCATGTCACTTGGCTTAGCCTGCTCCTTTTCAAGGGGATAAGTTGCCACAGCATTTCAAAGG
GTGTAGTCTATGAATATTTTTTAGAATCTCTAAAGATGAGGATTTTACAACATGGTATTCAACAGCAGAGTTTAAATTTT
CTTTTTTCTCACTTAACACTGAGTCAATTAACAGTTGAGACATTTTACATGACTGTGAGCAGTTGAGCACAAAAACCAGA
TGTTAAGATTGGGTACAGTCAAAAGTTTACAGATCCACACCTGTGTTATGTTTTGTTTATGTTCTGGAGCGCCAACTT
TGTTACATCTTTGAACCCACTTCAGACCTCAAATTACCACATTTTTTAAAGCCTCATTAGAATGGTATCATATAGTGC

242/375

TGAATCCATAGAACAGAAATTCAGTGTTCAGATTGCTAATCATGTATGAAAGTTTCTGAAATCATATTGTCCAACGG
GCTGTAACCTGGCCTATTCTTCTATCTCCTAAGGAAATGAAATGACTGGACACTGTTTATTATAAAGATACAGCAGGT
ACTTCCTTGTAACCTGTGCTCTTCTATATATTTTGAAGAAATTTATTTATTCATTTTTCATATTTATCAAAGTGAAAAAAGCAA
CATAGCTACTCTACTTATATAGCTCATTTTAAGGAATTTTATACTTGTTCCTAGTTTTGTGAATTTCTTATGAATTCA
CAAAAATAATGTAAAAGCTAATGGTCTGTCCCTGCTACCATTTGTGCATATTAGTCAACAAGTACAAGTAGAATATTTAA
AAGATTTATTAGTTCCTAATTATATATAGAAAAAGACTTTGAAATTTACTTAAGCCATGATTCTACCAAGATGTAACCA
CTTTTATTTTCTTTTCTTCCCAATGTTGACTGGTTATATGCATATTAAATGGAGCTATAATAATAATTTGTATACATTT
TTATCTTACTTTCTAAACCACATTATTATTCCTTAAATATTTGCTCTTTCTTCTGACACAGTCTTCTCATGTATCATTTT
GATTACTACATAATATTCTGACTTAATCGAAAGTTTGTATTTTGTATTTTAAATTTAACTGCTTTTATTTTACTAAAATA
TTAGAAATGATGGCTCTAGAAACATCCTTAGAAGTTTCTTATCTTTTAAATTTAACTGCTTTTATTTTACTAAAATA
ATCTTTAAGAAGCTGGGACTTACTAGGTCAAATCTACAATCATATTTTGTGTCCCTGTCAATTTGTAAACAAAAAGATGC
TATTTGAGTAAGACCTGCTTGATAACTTACTTATTAATCTTATTTTATTTTGTCTTGCATCACAATGAGTCAAATTTCT
ATTTTCTCTAATTAATCTTACGATCACCGGTACTTGGATTTAAGTTTACAGTGAAACAGAAAGAATTTTAAAAAAC
GGTTTAAGTAGGAGAAATATATTTTTCAGATCTCCTTGCCATCTGCTGGAATCACTAGTGCCACCACCTTTTCACTGGT
GCTCCTTTTGCTTCACTTAACTAAAGAGTTTTCACCTCAGACCCCTTATGATTTCTCCAAGATGCATTACATTTTCTGCT
GTTTCCATATACCTGGGAAATAGTTCTTTTCAATTACATCTTCTGCTCTATATTTTCCAGGTAAGTCATGCCTCCTTT
AAATTTTACTATTTTATCTATGTCTGTCTATCTCTACTAAGATGTTCTCTACCTTTGTTTCTGTCTACCTAAGTAG
CTAGCTACCTACCTACCTATCTGGAACCTACCTCTGTCTCTTATACCTATGCCCATTCTTCTCTTTTCTCTTTAAAT
TTTTGTGTGCTGTTTCTCTTTCTCTATTTCTGTATCTCGTTTGTGTCAAATTGCCAGACTACTTAATTAGTATATT
CATGTTTGTGTTTGAATTTCTATTACTGTATTTCTCTTATTTAGTATTTGTTTTATAATTATTATTTTCTTTACTTT
TTTGTGTTTATTTTCTATTTTCTAAGTAAGTTGCTTTGTGTCATTGAGTTTGTAGCCTTTATTTCTAATACAGTGATT
TAATTTCTATTGCTTTAGTGACAATCCCATATATTTGATGCATAATATATTTATTATTAAAGTTTAAAGTATTTTATAAT
CCCTTTGATTTCTTCTCTCACTCAAGTGTTATTTAGAAGTACTTTTAAATGTTTTCCAAAGGAATGAGTTTTTAAATA
AATACATTGTTATTAATTTCTAATTTTGTTCATCTTTAACAGAAGAGATATTTGTATAGTACCTATTCTTTGACATTGT
TGAAACTAACTGAAAAATATTAGTTAATTCATGAACACTGGATTAAATTATAATTATAATATTCAAAAAATATAATTATA
TTCAAAAGTATAATTATATATAAGTTTATATAATTTATAAAGTTTATAATATAAACCTATATTTTATATATTATTAAC
TAATATAAAATTATAAAGTTTATAATATAATTTATAATTTCAAAAAATTAATTTAGGCTTCTCTATTTATCTGCTTTT
TAATGTTTGTGTTTCTTTTCTGTCATTTTCTGTCATTTTCTAGTAAAGTGAATTTTCTCCTCTCTCTCTCTCTCTCT
TCCTTCTAGTTTGTAAAGTTTAACTCTAATTTCTATTTTATAAATAAACCCTAAAAAATTTTCCAAATATGTAACCTT
AAGGCTGAAGTTAAATAATATCTTTTACCCCTTTTACTGTCTCTCTGAGAAAATACAAAAGAATAGATTTTGTCTCTCT
ATATTGTATTATTAATGATAGACATTATCATTATTATTATAGTTGTAGTAAGTCATCTTTGGTGAACATTTTCTAACACA
TTTTCCATTTTCTTTGCTCAGCATTTTCTTTTCTTTTGTGATCTGAGACCATCTTTTATTTAAAAATGTCTTTTAGAA
GTTTCTCTAGTGAATCTCCAATAGTAGGGAATCTCTTCTCATGTGTGTTTCTTACTATCTTATTTTGTGCTTAGACTT
GGAAGGTAGTTTGTGTGTATGCATTACTGGGTTGACAACCTACTTCTCTTCACTCTTTAAATACGATACTACCTTGT
CTTTTGAGAAATCACTTTTCACTCTGACCAAGTGTACTTTTTTCTTTTTGGGTGCTTTGAAATCTTATTTTTATCTTT
GTTGTGTGCAATTTCACTCTAATGAATCCAGAAGTTGAGTTTTTCAAAAGTTTACTTAAATGTATTGGTATTCCTAA
ATATGAGTGTGGTGTCTTTTATTTATTTTGGAAAATCTTAGCTATTATTGTTTCAAATATTGCCTCGTTGCCATTCC
TTTAAATCTATCCCAACCCTAGTAAGACTTATGTTGGCCCCACTCTGTCTATTACCTATCTTAACTTGTCTTTCATATT
TTCCACTTCTTTTCTACTGCTTCTGAATGTTTCATTATATATGTTTCTGGCTCACATAATCAACCTTCACTAGAG
TCTAATTTGTTGTTTCACTGTTTGTGTTGAGTTTCTAATTTCACTTATTAGACATTCAATTTTAGAAGTTCTATTGGTCT
TTATTTCTAAATATGTGTGTTGATTTTATTTGTTGTTTGTCTATTACTAAATTTTTATCATTTCTTTAAACAGCTTA
AATATTTTTTTTTTATTTTAGTTCTTTGATAGTTCCAATATCTGTAATCTTGTGGTCTACCTGTGCAGTTTATTTCACT
GATTGTCTCTCAGGCAAGTTTATTTTTTTATGCATTTTCTATATTTTTTACATATGTGAGCTCATACTCTTTAGTAT
TTTATCTCTGGAATTTATCTGTGTTGAAAGTGTATTTTTCGAAAGAGGATTTGCTTATAATTTAAGTAAGTGCATGCT
GCTAACTATAGATTTACTTTAAATGAAATGTTCACTTTTGGGCCACGCAATATCCAATGCCATATTACATATCGCAA
GTATACACTTGTGATTAGAAATTTTTGAAAGAAATATTTGTTTAAATATGCTGCCCTGAAACCAAGCAAGTCTTGTTT
TGCTGCTGTTTATAGGCCCTTGTGTTTAGATTCTTGGCCCTGGAACCCAAAGAATTGGTAAATGCCTTTCAGGAAAAAACA
AAAAACAAACAAAGCAAAAAACAATTTCTAGTACTTAGTTATCCCTGTGGGACCAAGCTTTCTTAAATTTCAAGCCTCAA
AACTTTTAAATTTAATGATTTAAAGCAATCATCCAGTATAATTTTAGAGCAAATTTGTTGAATTTATACCATAAGAGGA
AAAAGCACACAAACCCTAAATGTAAATGTGGTAAATTTCCATGAAGATAACATACCCATGTAAGCAGCAATTAGATTAA
TAGGCAGTATATTGCTAAGCTGTAGAAGCCCCATTTGTGTACCTTTTCAAGATTCTGCCCCACCCAGAGTAAGTAACTA
TTGTGATTTCTAAGATAATATTATATTTTACCAAGAGAGTGTGTTCTTTGTTCTCTAGCTTCTTTTCTCTCAACAC
TGTATTTGGAAAAGTTATCTTTCTTTTTCTTTTTCTTT
CAGGCTGTAGTACAGTACCATAGTCATAACTCATTTGCAGCCTCAAACCTCTGGGCTCAAGCAGTCTCTCTGCTCTC
AGCCTCCCAAGTAGCTAGGACTACAGACATATGACACCACACCTGGCTAATTTTATTTTATTTTTTTTTTGTATAGACTGGG
TCTCGCTTTGTTGCCAGGCTAGACTCAAACCTCTGGGCCATAAGGAACATTTGTCTTTATATATGTAGTTGTAGTTCA
TTTTCATCTTCATACAAATATGTTATAAATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTTATTT
AAAGAGTTCCACTGCTTTGCCAGGCTGGAGTGCAGTGGCAGCAACTCGTCTCACTGCAGCCTCTGCCTCCAGGGTTCA
AGCAATTTCTCTGCCTCAGCCTCCTAAGTAGTTGGGTCTACAGGCACCTGCCACTACACACGGCTAATTTTTGTATTTT

243/375

TAGTAGAGATGGGGTTTTGCCATTTTGGCCGGGGCTGGTCACGAACTCCTCATCTCAAATGATCCACCTGCCTCAGTCTG
CCAAAGTGCTGGGATTACAGGTGTGAGCCACTGTGCCTGGCCCATTTTATTATTGGTAAATATTTGTTTTATTTTTATT
TGAAACTATTACAAATCATGCTGCTATGAACATTACTGTATACATCTTTTTGTATAATGCATATATATTTCTGATGGGT
ATATAGCCAGAAGTGAATTGCTTGATTATGAGGCATGCATTTTTTGAAGACTGACAGACAGTTTTCTCAAGTAGCTTC
TTCAATTTAGATTCCAACCAATATTTCTCTATTTTCTAAGAGCTCCACATTCCTGTCAACACTTCGTATTATCTTTTTCA
TTTTAACCATTCTAGTTGAGTAATATGTAGTGTTATTTTCATTGTAATTTTAAATTTTCACCTTCACTGATGTCTAGTGATT
CTGTGCATTAATTTTTTTTTCTGGACTTTTGAAGTGTTCTGTATGGGAACTATTCCTCCATTTAGCTAGCTATTTTGC
TGGAAATTATTGTATAAAATATCATCTCATAATTTAACAGTATATTCCTTCTTCTTCAAATTTTTATTAAATAAAT
TTTCAGTACTCTTGAAGTCAACTTTTAATTTGTCCAACCTGTCTTTGAGCTCCCCCTGCTGTTTTCTATTTAACTATA
TACCTGTTGATTATGCATAATTTCTTTAAATGATGGATTCTTAGCCAATAAGCTATTTTTAAGCAGAAGCATTTTTTT
TGCCAAAGACTAAGGGTATAAAATAAATTTAAATGCTAACTCAGGATATAAGAATTATTAATAATGCTTGAAACT
AGTATGTTACATATGGGAAATCTGTATACCTTCATAATTTCACTGTGAATCTCACTCCTCTAAAAATGAAGTCTTGAA
AAGTTAGTATTTTAAATACTTACCTTACTTGTAAATGTGAACCAATTTATTTAATTTAGCAAACTCAATGTTTTCAAAT
AATAACAACCTAGCAAACTACTGAGCCATATGTTAGGTATATTGTAAGCATGTTGAAGTCAACAACATGACTTCTACAC
TTTCTACTTTCTCAGGTTCCAGAAATATCTATTTTGACATAATTTATGAAAAAAATTTAAAGCATTTTATTTCCATTGT
CTTGCTACATCTAAATTCATGGTGTTATGTTTCTTTAGGGCAATGGAGCTGAAATGAATAATGGATACCATGTAGTGTT
TTTATATATTTTCATCTATGAGCTATGACAGATATCTCCCTACATTCACAGCAGAAAAAAATGTGCTTCTTTCTTAAGC
TTGCCAGCTATAAAGGCTATTAGACATTCAGAGATTATCAGGAAGCAAAAAGCTTCATAGTCTTAACAACGTAAATCT
GAAGTCTTAGAATGAGTTCATTAGAATATAGACATTGAATATGAGGTAAGTCTGAGTTGAAATCTATCTCTGACAAC
GCTGGATCTGTTTTTGGTTTCCAATAGTAAATGGCACTAATAATGATATATGCAAAATGTAAATGCTTAGCACAGTG
CTTGGCACATAGTAGATTCTAAGCTGTAGTTTAAACAGCTATTGTGCTATGAATAAGCCATACGTTGACATTTTCCCTC
TTGAGAATGTGCTATTTAAGTGTAGAAAACCTGCTTTCCCTGTCCGTGTGAATTTCCCTTAACATTCATCTTGGAATG
ATACCACATACCTTATATTGATGCACTGCAAGAGGCCAATCTAATGTAGGCATAAAAAGAGTAATCTGGTAATCTGCT
CTTCTCAGCACCTCTGCTAATAATGCTGTTTGAACAAATTTCTAGAAAGACTGTTGATGCCAGAGCCAACTCAGAATTA
GGCAGGTGAATGTTTTCAACTTCTGCTAATAATAACATCAGTTCTGTACTCTCCTCTGGGTTCTTTTTGCTGTATTA
GCTGCAGTTCCCTTAGGTTAGCTTCTATGCATAACCTGGGAATGCATATTTAGCTTTTTTACTTCCCTCCCAAAGAAAG
GAGCAGAAGAGGAGAACCATAAGATCTAGAAGATGAACTGTTGTATCCATTGTGTGGATTGAGATAAGCCTC
CACCAAAATATGGTTCAATGTTAAGACTAATGAGCAGCCCTACACTTCTCTCTCTCTCACTTTTACACACACACATA
CACAAACACACGCGCACGCACACACACACACACACACACACACATATACCCCTACCAAGAAAGTATG
AAAGTATGTATTACTTATAAAATTTATGAGGTTTTCTGGGGAGAGCAGGAGCAGGCTCCCAAGAGGCTGAAAGTAC
TGAGAGAGCAGGGGAAAATGACTGGTTTGAGATTTTATGACTTTTGTAGTGGGTGAGGCCATGTGAGATGTTTTGTG
TGGAATCTGCTGTTGTTTGAATTTCCCAACCATCACCAGGAGAGAACACATGGGCTTTCTTAACAGTTTTTCCCAAT
GTAGGACAGAGGGGAAGAGAGAGGTATAACACTTTAAAGCTATCAGCAATGACACATCAAAAAATGGACATAGATTTTT
TATTACAGAAATTAATTTGTATGAGAACAGAAATGAATCCCGGTGCTACACAGCTGATGTTTCTAGGAATGAGAACTA
GGGTAATTTTTTAAAGCACGTGTTTATATTGATTGGTACATACTAGTTAGCCAAATTTAACTGGGTTGAGATGGTGA
CTTTCTTTTTGAACCTCAGTTATGCAATTTGTAAGATTGTGTTTTCTTCAAATTTACTCAAATAATATTGAATTTCTT
ACAAATGCAAAATGAATTTGTGGCTTAATGTGCATATGTATATAACAGATACTTTGTTCAACTATATTATGAAATAC
AGTATGTAACCTTTCTTAAATAACAGGATGACAAATCAGTGTTAGGATTCAAATGGGCCCTATATTACTCTGTATCTCT
CATAGGCCAAGTGTTAATTTCTGGTACACATGACATTTAGCAGATGCTATTACATTTATTGATTGCATATTTTTATCTGT
TATCTTTTGGTTTCAATTTCAAGGATTCTTCAAAGAAATCAAGTAATCCTAGACCCCAATATATAAAAGAAACCACT
CATCTTAGACCCCAATATATAAAAGTAAATGACATTTTGTCTTGTCTTAATAAGTTTCACAGTATTTTCAGGAAACATGGG
AATACAGAAATAACAGATAAGAAATATTATAAGACTTCTAGTAGAGAAATATGCTTAAATCATATGTATGTTCCCTTTAC
ACCTAAGAACCTTTAGATATAAATGCATTTTAACTGTTCTGGAGAGTTCCAACCTCCAAAATAGCCTTTGTTTCATATCAA
GAAAGTAAACACCTTCTATTTCAAGGTGGGCTTACTCACCATACTGGGGCCACATTACTGTCCCAGCTCACTGAAAGG
TCATAATCCAGGATGAAACCAACTTGAAAATTTATAGTGAAACACAGTAGAATAATTTAGAAGCATATACTTTGATGTT
TTTAGAAAGTAAGGAAATAAACTTTAATTGAACTTGGAATAAACTCAGTTCTGAGCATTCATTTACTCTGCAGTTG
TCATTTATAGACAGCTGTGGATCATATACCTATAGACTAGATATCGTTATCTACTTATTTATTAATGACAGGATAT
CCCTGGGCAACAGCATACCACTGTACTGTATTTCTGGTTGTCTAGGGAACCTTTGCTGTGGAACAGCAGTGAGAG
CACTTCCATTGAATAAAGCTGCTCTGGATAGCCATGAGTTGCATGAAGTTATTTTACTAATTTTTATTTGCCCTTTTACT
TGAAAGCATAAGTTTCTGAGGATGTAATTTACAGTTTCCCTTATATTTCTACAGAAAGTAGTTATAGATGATGGACCTCCT
GAACTTTTATCACTTTGCCATACTCTGTAAAAATTACCTAAGAGCTCCAGAGCATGAAATTAACACTCAGGAATATTTGTA
GCCTAACCTTTTTTGTACTCTGAATAATACTGAATTTGAAGGGTCTTCCACAGCAAGCCCTCTTAAATTTATGCTTTCT
GATGCTTTACCTAAGGCTATACACTTGTCTTTAGATTCTTCTAGATTATTTTCTCCTAATACAGAACTTAGCATTTTAA
TGACAATTTTAAAAATTGAGATCAACTCTTCAAAGAAATCAAGTAAAGCAATTTTCAGCAAAAAAAAAAAAAAGCCT
TCTAATCTCTACAAAACACCTCTATCCTATCAAGATATTGTGATTGAGAATTAGAAATAGTGTGGAATCAGATGTTAG
TTTGTCTTTTCTTTTCACTGGAATTTCTCCATGCTTTTAAATTTTTATATCAAGAAAAACAATTTCTTGCAATATTTCCCTA
AGGAGAGTTTACAAAAAAGAGATAAAACAACTACTA
CCTAAGGAATAAAGAAATTTATCTGAGTGGAAAAATATGGTGCTTTCAATTTTCTAATTTGAATTTAAATAATTTATCTA
AGTCTTTTGTATCTTGTCCCAAGTGAATAAAATGCTTTTTTTTAAATTTATGTTTTCATTAGATATATCTCCATCTTTT
CAGTATTCACCCCAAGTTTAAATTTGGGTAGAAGAAATATGGAAGAAATTCCTATTGCTCAGACACCATGTTTAAAGCTTT

244/375

CTGAATGTGATCTAATACCTCCATTGGTTGGAGGTAATTAAACAGAGACTCTGTTCTTTTAAACAACATTTTGAGTGCTT
 TAAATCTGAAAGTCATGTCATAAATGTCAGACCTCTTTCTCTTTGCTTTTAAATCATCTCAGAAAGACTTATCTGTTAATG
 GAACATCTGCATATAGGTATTTTGTGACCACAGGTTTCCACATAAGTTTAAATCTACCTATTAGTTATATGTTTCATGC
 TATTGAGGACCTTTCAATAATAAATTTACTGAGTGTCTTACTCTCTTCTAAGAGTAATGCACATATGCTAGGAGACAGGA
 GGGATATAAAGGTAAAGAAACCATGGCATGAACTTTTAGGGAGATTATAATTTAGTGGAGAACACTAGTGAAAGGAGGC
 AAAGGAATTAATAGAACAAAGACAGTTTCTCTGAGTCTCCAAAGGCACGTGTAAAAATTCCTGGGGAAACTGCAAGCAAGA
 GCAAAATGTTAGCTATCATAAACATTCTCATGCATCTTCAGGTTTTATCTTCATCCATAAATTTACCCATTAAATTTAG
 ACATTCTACTATCTATTCCACTTGACATTCCAATTAGCAGCTCAGCCTCAGCCTATCAATATGAATGCACATCGCTTCC
 CTGTTCTCTTGCTGTGCCAGTCTTTCCCCAGTGTAGTTAGGTAGTGTCTCCAATCAGTCACCATCACCATACTGTGCTG
 ATTTTATATTCTGAATATTTTTTAAGCTTTTTTCTTTTATCAATTGACTACACTAGTTTATGATCTTCATCATATTATT
 GTACACAACCTGCTGGGTTTTTCTGTCTGGAAAGTCTATTTTCTCTTTTCTCCAGCTGCCTCTTTCTTCTGCCTCT
 GGATGCATTTCTCATTTTCTGCTTCCAAGATGTATTTAATACATTCCTCTGTGCTCTCATATGCTGATACATGTCT
 GTCGCTGTATTTGCTGTGTAATATCCAAATATTTGTGCATGTCTTTGTTTTTCTCCAAAAGTTGCAAGCTCCTTAAGG
 TCAGGAGCTGTTCTTAAATATATCTACTCTACCTAGTGTAGTCATGCTTAAATATTTGTTGAAGTAAACAAATCTGAACC
 CCAATGTATTATGTAATCTCCATATCCCAGCACAGATAAAGGATATGCTCTTGAATTGTTTTATTGGGAGAAAACAGC
 TGACAGATTAGGCTACACAACAACTAAAACTAAGAAATGACTACATGATAAATTTGAATGAAAATCGGAAGGCAGACT
 GACTGAGGAATATATCTCTAACAAGTATTCAAAGATATAATTTTGTATTGTTAAAAAGAATACAATGAATGGAGAGAG
 GGTTTGGATTTCACATTGAGGACTTCTGAAGACCAAGTATAAGAGATTCAAAGTGATAATGTGAATCTGATTAGAAAA
 TTCAATTTTGGAAATTTAAATAAGAAAAAATTAGTTGGTCTAGCAGGTGAGGCTATAATATGGAAAAATGAGAAAGGGA
 TACAGCACTGAAAGTGAAAATGTGGAAAGAGAGAAGATCAGAAGGGGAGAAAAAAGAAGAAATAAAGGGTTAGAGTTT
 ATGAACTGTACAAAAGAAATGATACAATGGCCAGTCCGTGAGGGTAGTAGAGGGATCTCTTTATTGTATTTTCTTAT
 TTTATTTTATTTTAGAATCAGGGAGTACACGTGCAGGCTTGTACATGGGTAAATTCGCTGAAGCTGAGGTTTGGGCT
 TGTAATGATCCCACTGCCACGTAGTGACATAGGACCATAGGGAGTTTTTCAACACTTGCTCACCTCCCTCCCTCCAC
 CTTTGGAAATCCTCAGTTGTTTCTGTTTCTGTTTCTGTTTCAATTCACTGAGAATAATGGCCTCCAGTTCCATCCATGTTGCTGC
 AGAACATGTGGTATTTGGTTTTTCTGTTTCTGTTTCAATTCACTGAGAATAATGGCCTCCAGTTCCATCCATGTTGCTGC
 AAGGAACATGATTTTCATCTTTTTTATGGCTGTATAGTATTTCTGGTATATATGTAGCACATTTTCTTTATCCAGCCAC
 CATTGGTGGGCATATGGGTTGATTCCATGTCATTGCTCTTGTGAATAGTGTGTGATTACATATAAGTGCAGGTGTCT
 TTTTGGTAGAATGGTTTTATTTTCTTTGGGTATACACTCAGCAGTGAGATTGCAGGGTCAAATGGTGGTTCTATTATTA
 GTTCTTGAGAAATCTCCAACTGTTTTCCACAGTGGCTGAATAATTTGCATTCTGCTCCAACAGTGTGCAAGCGTTCCC
 TTTTCTCCACAGTCTCACCACATCTGTTACTTTTTGATTTTTTAAATATACTAGCCATTCTGAGTGGTGTGAGATAGT
 ATCTCATTTGGTTGAGTGTGGTTTGTCTAATATTTGTGGAGGACTTTTGCATCTGTTTCATCAGAGAGATATTGGCATGTA
 GGGTTTTTGTGTTGTGCTTTTGCCAGATTTTGGTATCAGAAAGATACTGGTTTTGAATTAGGAGTTCCCTCCTCCTTGA
 TTTTTTTTTTTTTTTGAATACTTTCAGTAGTATCTGTATCAGCTCTTATTTGTATGTCTGGTAGAATTCAGCTGTGAAT
 CCATTTGGTTTCAGGGCTATTTTTTGGACATTAGGTTTTTTATTACTGATTCAATTTTCAATTACTTGTATTGGTCTGTTCA
 GGATTTCACTTTCTTCTGTTTAAATCTTGGGAGGTTGTGTGTGTCCAGAAATTTATGCATCTCCTCTAGGTTTTCTAG
 TTTTGTGTCATAGAGATGTACATAGTAGTCTCTGAGGATCTTTTATGTTTCTATGGGATTGGTTGTGATGTCATTTTG
 TCATTTCTGATTGTGCATATTAGATCTCTCTCTTTTCTTGTAAATCTAGCTAGCAGTATATCAATCTTTTTTTATCC
 TTTCCAAGAACAACTTCTCATTTTTGTATATCCTTTGTATAGTTGTTATGGGTCTCAATTTCAATTAATCTGTTCTGA
 TTTTAGTTATTTCTTTTTTTTTCTGCTAGCTCTAGGTTTAGTTTGTCTTGTTTTTTCTGTTTTTTTTTTTTTTTAGGT
 GCGATTTTAGGTTGTTAATTTAGATGTATCTTCTTGATGTAGACATTCAGTGTCTAGAACTTTTCTCTTAACGCTGCC
 ATTGCTGTACTCTAGAGGTTTGGTATGTTGTATCTCTATTTTGTGTTTCAAATAACAGTTTGTGCTTGCCTTAA
 TTTTGTGTTTATTTTTTAGAGTCAATTCAGAAACAAAGTTGATTAGTTTCTGTATTTGTGTTTAAAGAAATCTCCTTGC
 TGTGATTTCTGTTTTTTTTTCCACTGTGGTCTGAGAAGATGCTTGGTATGATTCTGATTTTTTGAATGTATTAAGACT
 TGCCTTATGACTATGTGTTCAATCTTGGAAATATATATCATGTGCAGATGAGAAGAAATGCATATTTCTGTAGTTGTGGGT
 GGAGTATTTCTATAGATGTCTATTAGGTCCAATTGGCCAACATCAAAATTTATTAATAACAAATTTTTTGTAGTTTTT
 TGCCTGTCTATTGCTTTCACTCGTGTGCTGAAGTTCCCACTATTATTGGGTGGCCATGAAAGTCTTTTCATAGGTCTA
 TAAGCAATTTATTTATAAATATGTATCCTCCAATGTTGAACATATATATATTTAGGATAGTTAAGTCTTCTTATTGAAT
 TGAACACTTTATCATTTATGTAATGCCTTTTCTTGGTCTTTTTTACTGTTGTGTTTAAATGTCTATTTTTTCTGATATTA
 GAATAGTGATCCTTGTCTTTTTTTTTGTTTCTTATTTGCATGATAGATCTTTCTCTATCCATTTACTTGCAGCCTAGCCT
 ATGGGTGCCATTACAAGTGAAATGGGTATCTTGAAGTTAGACTTGTTTTTTAGTCTAATTTGCCACTTTTTTGCCTTTTAA
 ATGGAGTGTTAAACACTATGACAGGAATAAAACCTACATATCAATATTAATTTTGAATATGCAAAAGTTAATATTGATATGTG
 TGTAAACACTATGGCAAGAATAAAACCTACATATCAATATTAATTTTGAATATGCAAAAGTTAATATTGATATGTG
 AGGTTTTATTCTTGGCATAGTGTATTATCTGGTTGCTTTGTAGTATTGATTGATTCAGTCACTGCTTAGGGCCTGTGGGCTA
 TCTGCTTGCATGTGCTTTCAAGGTAACAAGGATCATCCTTTCTTTTGTGTTTTCATGTTTAGAATCTCTTAAAGTATCTC
 TTGTAGGTCTAGTGTGGTGGTGTATGATTCTTTTAGCAATTGCTTATCTGAGAAAGAAATTTATTTCTCTTTCAATTTATG
 AAGTATAGTTGGTGGGATATGAAATTTATGGTTGGCATTTTTTTTTCTTTAAAAATGCTAAAAATAGTCCCCCAATCTCT
 TCTGGCTTGTATGGTTTCTGCTGAGAAGCCTGCTGTTTAGTCTGATGGGTTTCCCTTTATAGATGATATGACTGTTTTCT
 CTAGCTGCCGTTAAGTTTTTTTTCTTTTACGTTGACCTTGGATAGTCTGATGATTGTGTGCCCTTGAAGATGGTCATATTA
 TATAGTATCTTCCAGGAATCTCTGGATTTCTTGTATGTGCATGTTGACTTCTCTGGCAAGATTGAGGAAATTTCCCT
 GAATTATATCTCAAATATGTGTTCCAAGTTGCTTAGTTTCTCTTATCTCAGAAATGCCAATGTCACTTTACATAACCC

245/375

CATATTTATTGAAGGTTTTATTAATTGTTTAAAATTATTTTTTCTTTATTTTTGCCTGCCTGGGTTGATTCAGAAAGC
TAGTCTTCGAGCCCTGAAATTCATTCTCTGCTTGGTATAGTCTGTTGTTAAGGCTTCCAAGTGTATTTTGAAATTTCCC
ATAGTTAATTTTCAATTCAGAAAGTTGTGTTTGGTCTTTCTTAATATAGCTATGTTGTCTTTCAAATCTTGGATCAT
TTTTCTGGCTTCTTTGTGTTGGATTTCAACTTTCTCTTGGATCTCATTGAGTTTCTTTGCCATCTAGATTCTGAATTCT
ATATCTGTCATTTTCAGACATTTTCACTCTGGTTAGGGTTTCTGCTTGGGAGCTAGTGAGATTCTCTGGAGGTGGTAAAA
CACTCTGACATTTTGTATTGCCAGAGTTCTTGTGCTGGTTCTTCTCATCTGAGAGAGCTGATGCTTTTTCTTTCTTT
TTTTGAATTTGCTATTGTTTGGATGGAGCTTGTGATTTTAAATTCTTTTTTCCCTTGTGGGTATGACTGTGGTGTAAA
ATGTGTATGGGTGGATCAGCTTCATTTCTGAGTGCTTTCAGGGCGCCAAGGCTCTGTATGGGTTCTTGGTTGCAGATA
AGTTTGTGCGGTGGCTGAGACGTTGCTTCTTGTAGTGATGTAATTTTGTGTTTGTAGTGTAATTCAGGCTGCAGCCAGT
AGGTGGCACTTAAGAGTGAGCGCCAGAAGGTAGGGGCAAGGGCAGAAGCAATGGAAAAGTCTGCAAGTGCCCTCCTTC
AGCGCGTTTGCCTTCAGTGGGAGTGGAATTGCTGGAGAAGCCCCAAAAGTGGTCTCTTTAGCCCACTCTCTCGGTT
CCGCTGGGGAGAGCCACCTTCGAGTCCGCAACAGTACACTGAAGAGGGATGAGAGAGGTGAGCGATGACCCCTTCTCGA
CAACCATTCCCTGGCTTTGGTGGCGCCCCCTTCAGTGGCTAGCGCAGTGCTCCTGTTTCTTTGACCCAACCTTTGACC
CAAGAGGGGCTTTAGCCGGCTACATCCCCCTCCCTTAGGGGCGGACTGAACCGAGGGCTAGATTTCTAGGGGAGTGGGT
CCCTTCCCTTACCATTCTTCAGAGCTGGTGGGTTACTGTCCCCCAACTGAACAAGGAAGCCGACTGGGGAACCCAGTAG
TTGATATGTAAGGGATGCTGGGAAGTGCTGGGTAAAGAAGGGTGAGTCCCTGGCGAGGGCTCCACCCCAAGCCTGTGC
CCACGGACCTAGGTGAGGACAGGCACTCCAGCCTTTGGGCCCCAATGTTGCATTTCCCAAGACCAACCTAGCCTACCAT
GCCCCCTACCATCCTGTGCCTATAAAAACCCCAAGACCCTAGCGGGTAGAGACACAAGCAGCTGAAAAGTGGAGAGGACA
TCGAGGGGAGCAGCTGGTGGGAAGAGCACACCAACAGATGCTGCCACCTGGCAGGCCGTCCAGCAGAGGAATGACGCGG
AGTTTGGTTCGTGGCAGTCATAGGAGAGCCCGGGCTGCTGAGCGGCTGGACTCCAGGGGGAACCATCTCCCTTCTGGCT
CCCCCATCTGCTGATAGCTACTTCCACTCAGTAAAACCTTGTACTCATTCTCCAAGCCCAGGTGTGATTCAATTCTTCC
CTCACGCCAAGGCAAGAACCCGGGATACAGAAAGCCCTCGTCTTGTGATAAGGTGGAGGGTCTAATTGAGCTGGTTAA
CACAAGCTGCCTATAGACGGCAAAACTGAAAGAGCCCATGGTAGCACATGCCCACTGGGGCTTTGGGAGCTGTAAACAT
CCACCCCTAGATGCTGCCGTGGGATCGACCCCCACAACCTGCATGCTCCCTTAGAGGTACGAGCAGCAGGGCACTGAAG
AAGCGAGCCACTTCTCCAGTTGCACACCTTGCAAGGGGCAAGGGAACCTTCTCATTTCGTAGCAACACACGCAGAC
TGGTTCAGGTCTCAAAGCTGCCCTAGCTGACATGTCTTGCCACCCAGAAGAACCTGGCTTCGGGAACCTCTCCTGCC
CTGCAGTCTTCTAATGCTTTATGTCTCTTCTCTATCGCATCCAAGCATTCTCTCTAGACTACTGCTCAGAAGGTGTC
CACTTACTATTCTGGCGTTTCTCTGTTGGGGAGCCACACACTACCTGCTTCTGCTCAGCCATCTTGATCCCTTTTCATGT
CTCTATTTATGAAGGATGAAAATGGAATGGAGACATGGAGATTGAGGATTGATGATGAGGCTTGTGAAATTTGATGAT
AATTTCACTAAGAACTTAGAAAACAGGGCCAGGGGGTAATAAATGAGAGACACAAAGAGAATGGAGTAAGTAGATATGA
TGGACTTGCAAAGAAAAACCTTGTGGAAGAGCAGACGTGAGCTAATGGACTAAGAGAAGCATGCAAGTGGGGAGACTA
CTTCTGATAGTAACATTTTGGGAAGAGTGTGCCATCAGGAGAAAGCCGACTTCAGTGTGGTCAAGGAGCTGAGCAAGT
TATATCCAGAAGTGATCAAGGATATTTGTGAGTTTGTCTTACAATATCATAAAGGCAGGACAAGACTCAAGGAAGATTCC
TAGGGAGGAACTGGTGGGGAAGTCAAGGCCAACTGGGCTGGATAAGGTAGAAAGAGCATATTGATGAAAATAACAGC
CTTAGGTGGGAATTTAGGGGGTAACCTGAAGGGGATTTGAATACAGGAGCCTGTGTTAAAACTAGCTTTTCTTTTC
TTGCTTTTTTCTTAGAAATGTATAGAACACATCCATTTATTCCAACACTCCAAGTGAGGAATAAGGTTTGGGCTCAGC
TTGTAGTCCGCACCAATCACTGAGTATTATTTTGGGGGCATGTTTACGGGGAAGGTACGTTGCTGGTGGGATTGTTTC
AAAGTCTTAATGCAAGTGCCTCAGGTCTATTGCTAGACATTTAGAATTTTCTTGGTTTTTTGAAAGAGAAAGATTAGGG
ATAGTTAATAGTAGTTTAAAAGACTGTGCAACCTTAGTAACATTTCTTTGCAATAATTAATTAATAACAGGAAAAT
TTTTGCAAAAGTTTGGGCATATAAAATAAATGAAAGTTATGACTAACAGTTCACTTTCTCCTGATGTCTCACTTTTGT
GAGAACTGATGTAGACCAGAAAATAAATTTCTAGGTGTTTTTGTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTA
GGTTGACAGATCTAATTTTCATGTCAAATTAGGACACTGACTTTCCCTAACAGATGTTGAGGAGCTGAATTTGATTCCT
AATTCTAGTCTTGCTAGTATTTATTTTGGAGACCTGCAATCCATTAATACTAATAACATGGCAATGCTAGGAAGTTAA
TGGCTATACGACTTCTAGAAAGTGCCCTTATTACATGACTGACACATGCAAAATTCACAAGTGGAGTACAAAACAAATTC
AGCAGCTTAGATGACATTTTCTCCTGCCAGTGGTCTGAACTCACCAGGTAGCAACACCCAAAGCATTACATTCTGTC
TCCCTGAGTTGCATTGTATTTTGTATATCACAGCATAAACTGTCAAAGGAAGTATTTCTCTAATTTTAATTGGGGTTAC
TAGGGTCAAAGCCAAGTTTCCAAAGCTCATTTTGTTTTTATCTTATTATCATGCATTTATAGTAAGCCATTTATTTTTT
GAAGCAATCCTTATTATAAATTTGAAAAAACTATTTGTAATGTGGTCAGATGTGATTAGATCACTGTTTTATGCTCA
GACGTATGTTCCACCTTTTCCATAATGCTGTGACATTTGGGGTTGTATAGCTTCATGAATCGAACTTAAACAGTAAT
GCATTTTCACAAATAAATAGAATCACTCTTCTACCTATTATGATGGATCTTAAATATCCTGCCACATCTCTCTCGTT
ATTCATTGAGTTTCTGATCTTAGTAATTTACCTATACATTAACATTTGTAATTTATGATTTAAATCACCAGGACACCT
ATCATTGGTCTCTAAAACCTGAGTTGCTGGTGTGTAGAGAAAATGTATTTAACTTGTATTTATGAATATAACTGGATG
AGATTCTGGTTATTTAATAGGCAGTTTAACTTGAGAAAACAGAGTAGATGGGAAAAATGAGAAGTACTGTGCTTTAACA
ACTTTACATTAATTTGTGTTGTTTCACTGTGAGCTAGTTTATTACAGTATATTGAAGTGTTTACCAAATAGTAAACTCGAT
TCCAGTGTTTAGAACATGCTTTTTTAAATGACATTTTAAACATTTTGCCTTATTGCAAGGCATTTACGTATATACAT
TGAGAAGCTGTATCTGATCATGTTTCTGTCAGAGATGTGTTATGAACTGCTTTAGTACACGGATTTTGAATCTTAAACA
AGGATTTTGGCCACCTGCAAAATAAGAGGTTTTCATTCTTTTTTGAATAGTCTTTTTTCTGGGTCCCCAGTGTATATTT
TGCCAAAATGCCTAAAAATATTGCAATAAAAAAACTCAGAGTTTGGTACCAATCTGACAATTAATTTTTTTAAGCCTTTA
AAAGTATATAAAACATTTTAGCCAATGGACACCTCTCACTGAATTGACCATATAGATCATATTAGTCCATTTTCACACT
GCTGATAAAGACACCCCTTGACACTAGGAAGAAAAAGAGGTTTAAAGGACTCAGTTCACATGGCTGGGGAGACCTCACA

246/375

ATCATGGCAAAAGGCCAAGGAGGAGCAAGTCGCGTCTTATATGATGGTGGCAGGCAAAAGAGAGAGCTTGTGCAGGGG
AACTCCTCTTTATAAAACCATCAGATCTTGTGAGACTTATTCTACTATCATGAGAACAGCAGAGAAAGACCCACCCCAT
AATTCGATTGCCTCCAGGACACATGGGAATTGTGGGAGCTACAATCCAAGATGAGATTTGGGTGGGGACACAGCCTAA
ACATATAATAGACCTATCAGTTCCCTACACTAATAAACTTCCCTGGTATTATTTCCACAGCACATGTACCCTGGAAAAT
TAGCTCCAGGTGATGAGAAAATTCAGTTGAGGGCAGTAAAAAAGAAACCAGGTATTCTCACACTAATTTGAGGGTTTAAAT
CTCACTGGGCCTCCTGTTTGTGTTTTAGTGCAATTGGAGGAAAATTAGATTTTCTGAGTAAATAGAAATGAGCAATGTTCC
TATGTATATACACTTAACTCTTCAAAAAGAACACATAGGTCTGTACTGGCACAAGTAAAATGTTGTAGAAAATTTGGGTC
AGGTGCCAAGTGTGAGCAACCTCACTCTCCCTAATCAGACAGCATTTCTTATATTATTTCTGGATTAATATAAGTAGGT
AATCTTGAATAAAATCTCTAGTGAATGTTCTACATCATTTATTGTGTCAGTGAATGTACAGATGGGATAGTCCCAGTAAAT
TTTTTTAGAAAACCAACCATGTTTCAGGATCATGGTACTTGTATTCAAGGTTTTTCATGGGCATTCAAGGAAGAAAGAG
GTGATGCAACATGCCGTAAGCCAGATTCTCTAGAAAACAGACTTGGAGGCAGAGATTTAGGCCCAAGAAATTTGTTTGG
GGGTGGGGTTCTCTTAAGATCAACACCTGTGTGCAGTAGATTTCTCTCTCTTTGGATAAAGGCAATTCCAGGAGAGAGA
CTTAGCTGAGAAGACTCCAGCTGCTGGGGGAATGAATGCCTCAATCCTGAATGGGTATCTGGGTGTCATATTTGAGCA
AAACATCCTAACTTTAGTAAATAAAGCTACAGCTTTTTCTTATTTCTCCTATCTGCTTCTTGCCTGGGCAACCTAAAAT
TTATCCATTATCCCTGCTATCTCACCAGGAAGAGTATAGCGATAAAGAGCAATTTCTATATCTTATACATTATATTTAA
CTATAACATTTATTGTTATTAGATAGTTAGATTTAAGTAAGAAAATAAGGTATTTCATGATTCTTTTGAATCTGTGTGAATA
TACATATAGTTAAATAGTGACATTGAAAAGTATGGTGAATTTTTATATCATCTTTCTGGAGAAAATACTGAGGAAAATACT
TGAATTTTGCATAACCAAGGCATCAGTTACTATTACAAATGAGACTACAGAGAAAAGCTTTCCAAAATGTTTAAATGAAA
TATGCTTTCAATGTTATGTGGTTTTCTGTGATGTAGCTACTTAATTAGCATTGTATCAATCACCACCTGACATCAAATA
TGATAACTTGCTTTACTGGAAGTCACTGCTCAATCTCATGAATGAAATTGATGAGGTAGAAGGTAATGGTGCATTGCC
AAGAAAACAAGAAAGAAGGGAGCTAAAAATTGAGAGTTACCTACTTTGCAGTATCTGCTTTATATATGGTATCTGATTT
CAGTTTATCTGAACCTCTCCCTGGAAGTAGCTATTATCAACTTTATGTTATTTACTTACTCATTTTATTCTTTTTAAAA
AGAATAATGAGATGTTTTTAAACATAGAGAAAAGTGCACAGGGCAATATAAAATACATACATAATCATCTCCCAAGAGT
AACTAATGTCAATTATAGGTAAAGTTTGTCTTCATATCATTTTAAATATAAATATTGCAGATATGCTTGAATATATATGTTA
GGCCATATGTGTTCAAGCTGAGGAAAAGGTAGGTTTCAGAGAGAAAATAATCTTGGCCAATCTCACTCTGCTAGTAAGTAGG
GCTAAGATTTGATCGTCTATACGTGGATCGTGGAACTCATGTTCTTTCCCTCCACTATGTATACCTCCTCTGTACTCCC
TGAAGACTTAACTGGAATAGAGATACATTTGCCCTAGAGTTTCTCTATAGTGGGAGAAAATGAGCCTTTTACTTTCTGTGGTA
CCACGTCAAGTTGCCAATTGATTCTGGCACATAAAAAATGTATTATATCTTTACCTGTTTAAATTATTTTCTGTACCACATC
AAAGGAACAAGATAAAATTTGGTTATAATAGTTTATTTTACTTTTAAATTTACTATTATTAGTCATTGCAGTACACAAATGC
AGATGTCTGAAGGGATGCACAAAGATGACAAATGAGGCATGTAAACATATAAAGAAATACTACATTTCTAAGTGGTTTAC
ATTATGTGTATGAACATGAATTACCTGCATGGATTATTTTAAAGTTCAGAACTGTTTTTAGTTGGTTTTCTTTCTTTT
CTATAGCTGTTATTTATGTCTCCAGCTTCATCTTCAAAGTGGAGATCATAATATTTATCTCATAAGACTCTTAAAAAAT
GAGATAAAAGCATTGTATGAAAGCATATGAAAGCAATTGACTGAGCAATTAGTATAAAGAAGCTACTTAGTACTTATTT
GCTATGGTCACCTGAAAAAGAAAAGCTATTTTGCATGCAGTGGTAGGGTTGAGAAAACAGCCAATATATTAATATTTTAA
AATATTTTTGTTTTAAGTTCAACCACCTACTTTTTAGAAAAATCACTTAGCATATGAAATTTATTTTAAAGAGGATACCTTAC
TCCACAGTTGCTTTAGAAAGAAAAGAAAAAGAAAATCAGTTTGTAAAATGAGATAATTGTAAGGGTATCTCATCTTTGTAG
CCATATGAGAGAGTCCAAAAGAGCTAAGCAAAATATTTGCGAAATGATATTTTACTATACCTGGAAGTAATAAACAAATTA
AATGTTGTTATTAAGGCAGTGCTGATATTATAATTTTACTATCTCTAGAGGAATACCAGAGATCTTATTAAACACATGC
TTTTTTAAAGTTGAAATCTTAGATAACTATTATCATTTACTATATGTGTAAGAAAACAACGGCATGGAGAAAAGATGTGCT
CTATAGAAAACCTGGTAGGTTATTAATAATATAAAGAAAATAGGGAGAAAACGAAAATGTCATGATATTGTCAAGTCTCCC
TTGGGACTACCCACACAACAGTTCTTTTCATGCAAGTTCTTTTCTTAAATGAGTCAATTTGAGTTCTTTTTTAATG
TGGGCACAAGGAACAAATAAGGATTTCTTCCATGCAGCTAAGGCACCCCAATCTTATTAATCAAAATGTTGAGAGCAT
TGAAGCCATAAAGACAATAAAGAACTGAAAACACCATGTATCTGCTTTTCAATTTAAATAGCCAAACAAATCTGTATTTTC
CAAGTGGGCTTCTTAAATATACATATTTTAAACCTTGTAAGGTAATTTCTCCAGAGAAAATATGGAGGTCTAAAAGACAAA
GTAATTCATTTATCACCTTAAATCTCATTTAATAGGGAATAATTTCTGATATATCAAGAAAGAAAACTAATTACTGTCT
TCTAGATGCTTGTGCTTTTGTAAAGAAAACAAAGAGCTCAAGCAAGTAGAAGCCTCAGGAAGAGAGCAGTATTACAGAGG
GACCACAGCAACAATGTTTTTTTTTGTGTTTTTTTTTTTTTTTGTAGATGGAGTCTCACTCTGTGCGCCAGGCTAGA
GTGCAGTGGTGTGATCTTGGCTCACTGCAACCTCTGCCTCCAGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTGAGTA
CTACCACACTCAGCTAATTTTTGTATTTTGTAGTAGAGATGGGGTTTACCATATTGTCCAGGATGGTCTCTATCTCTTG
ACCGCGTGATCCGCCCTCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCGTCACGCTTGCCCAACAATCCTT
ATTAATATTAATAATTTAAAAATTGGCTTGAAGTGGAGAACACTTCAAAGCTCATTTACCACAGAACTTTGTCAATTTTC
TCCTTATTTGACTCATCTCAGTTGGAAAGCACAGATGTTTATGCGTCTGCTTGGCTCCCACTCTCCCTAAAAATTTTAC
TTACCAGCTAAACCGCAATCCTAATACATCCAACAATATTTTACCATGAAAATACATTCATTTTGTATTTAGATGC
ATACAAGTCTCCTGAAAATTTGTGAAAATATTTCCAAGTGTACTTTGGAAAAGCTCTCTGAAGATCCCCCCCCCAAAAAA
AAAGAAGATTATCTCTAGTGGTTATATTTTTTGAAGGTTTATTTGTTCTATTGAATATATATCTAGTTCTTTTTTCATAA
AAATGAATATCCTGGCTTTAAGTAACTGTTTGTCTAAGCACAGTGTGCACAGCTATGCACACACTGATATCACCATTGCC
AATTTTATTAAGGAACCAATAACAGAGCAAAGAGAAAAAGAGAAAGTGTCCCTATTAATGGTATTTCAAAATGCGTATT
TAAACAGCTTATCTACTCCAACTAATTTCTGATAGATTAAATAGCTGTATTCCAAATCTTACAAGATGCACATCTCTC
CTCTATTTCTTTCTCGGCTTGCTTCAGCTGAATAGCTCAAATGTTTGGCACTGGTAAAGCATGAAAATGTGAGATAAA
AAAGGAAACGAAGCTACAGCCTGAGTGGCCTACAGGCCTTAGAAAATGGCAACACTTTAAATTCATTATATTTTACATT

247/375

GCTTCAACAGTTACACATTTTTTTTTTTTTTTTTTTTTTTTGGCTCTTGATGATGTCAGAAGATTTATCTGGGATGTCTGT
CTCCACGGGTAAATAGTGACCGGGGTGAAAACCTGAGGGAACTAGGGAGCACCTAGACCCCAAGCCTTAGTAGTCAGCTC
TGGAATGCTCCCTGCAGTGTGGGGTGTGAGTGTGGTGTCTCTGTGTCTCTGTGTACACACTGTGTGTCTGATGTGCAGA
GGGGAAGGCAGGGAAGAAATACTATGGCAGACAGTCACCTTGTGGTAGCTCTCTAAAGGGATCTGGCACTTCCTGCCATT
TCATGGAAAAGAGGAATGAGAAGGAAATAAGCATTGTACATGCGGGATCTCACTGGATGCTTTTCAGTGCTAGAAGGG
AGCTATTTCTCCTCCTAACGTCTGTAACCTACCAGATTTCACTAATTCAGAGGTTGCTTTGAAACTCAGAGTCAAATTC
ATAGCCAGGGACTAAGTCTTCATGATGTGCCTTTTTGTGTTTAGCCTCCTTTCCGGCATGTTTTTTGTGTTGCTCTCCTT
CCTGATTACTTTTTATTAGTGCTATCTTAGTTTATGTATTTTATAAACTGCCTTAAATGCTTTCTGGAACCACTGTGC
ATTTAATCAAATAGACTAATAACTAACTAGGAAAATGATAGGGCTGATAGCATCGTCTGACCCATGAGGAAGCTGAATT
TAAGTAGCTTGTCCAAGGTCACTCAGCAAGTCCCTTGTGCTGTGAGTCTGGTTCCTTGGCTTTTCAGTCAGTATTTTCAAG
TTTTACCTACTTATTTTCTCTTAACTGAACACGAAAAAAACCTCAAATGCTTATTTCTTTTAGCTATTTCTATTTCTCTG
CAGTTAATGTCCTATCAACTTGAAATTCCTCCCTGCCTTTCACTCCAGTAGAAGTTTCGCTCACCTTTCCAGGATG
CTTGAAATACCTTCTCATGAAGCATTCTTATCCTGAAAAAGCATCATTTGTTACATCTCTTCTTAGACGCTCCTTTGGC
TTCTGTTTTCAATCTAGAAATTTGTTTCTCCCCCATCTCCATACTGACTAGGATTTTGTGTTGCTTGTTCAGTTTAGAT
CACAGGTGTTAAAAAGATGATCTTACATATTTAAATGATGGACATATGATTCCTATTATCTTCTACTTCTATGCATTCC
TGATAGACAACCTCTTAGGCTGGAACTAAAACAAGAGGCTATTAATCTATTTTGCAAAATAAAATGTATTCTTTAA
GTTAAGTTCTTGATGCAGGGAGAAAACATTTTATGATTTTCATTTTTACTTCCACAATAATACAAGCATGTCAAGTATT
GACCTACAATAAATGCTTAATAAAAACCTAGTATTTTTCAGTCACTTTAACAGGGCATGTATATTTAATGCATTAAAG
CTCCATAGGCCATGTCTCTATGTACTTTGTATGCTCAGAAAGGAGTAATGTACACTGGTGGTTAAGAACATATTAA
CCTGAGTACATCTTTAAACCTCAGCTCCACTCCTTGCATGTTGTATGACATTGGCGAGTCATTTTAACAGCTATGGGTCT
ACATTTCTTTCACCTGTAAAATGGGGATAATAATAATGTCTATTTAATAAAATGTATTGTGATAGTTAACTGAAATAAAAC
ATGTATAAAGCATGCAATAGGGCACATGGGAAGTATTTTATAAGTGTGTATGTTATTATTAACCTGTAAAGAATTCAT
ACAAGAAGGCACAGAAAAACATCAATTGCAACTAAGATGAAAAGTTTGTGCTGTTAGAGCAGGAGTAGTTAAGATGGT
ATGTATTTCAAATATCCAAAAGCTTCTTCTATTTCTGGAGAGCAACCATGGGAAGTCTATTGTGGCATTAGATAGTCC
ACAGAGAAAAGACAACAGGATGGTGAGGACAGGAGTTGGGAGGGTGGAGCCAAGGAATCAAATAATGTGGTTTCTTAGA
TGACATTCTTTTTCAGAAGCCCAGAGGTGCCACATCTATTACAAAGTCTCTAACCAACCATATCCATGAACCTATACAA
GATAAATTTTAAACAGAGTGAGATTGTCTTCACTCTACATCAAATATAGAGTCCAGAAAAAATATTTTATATCATGA
TAGTGATAATAATTGAAGGAATCAGAAGGAGTTGATCATTCTCTACAAGCTTGTGTCATGAGGAGGGAGGTGAAAAGC
ATTAAAAAAAGCTTAAACCTTTTCCCAATATTTCAAAGTAGCTTTGATGGTATTTAGATAGCAAACTCATTTTAAAG
AGAATAGGATTTTTCACAAAACGGAAAAATCAAGCAGCTGGCATAGTAAGTTATCTGAATTTGATCTGAATTGACGTCAG
GGAGCTGGGAATGCCCTGGCAATCCTGCATTCTCTCTCTTTGTGTCAGTATTTTGACAGTAGTGAGAATGTCTGAGTGT
TAATCATTTTCTGACAGTGTAGGCTCTAATCTTATGCAAAATGAAAGCATTTAGAGATTTTACCTTCTTGGTTCCAATC
AGGGCATTCTTCTAGAAAACTATTCTGCAGTAAGATTGTGTATAACTTATTTTACATTTGTATATGTTTATATATAT
TTATATTTATATAATAAACCCTAAAAATATGTAAGTGTCTAAGTTTGGTAGTAGCCTTCTTCAAAGCATCATTTCTGAGA
AGAGAGTTTATTTTGTAAACCTTACTGGTAGAGACATAAATCTAAGAAAAACAAATTCATCCAGACTTTTGTATCCAA
ATATGAATTTTAATTTCTGGGTATATCTTTTTTTTAAAAAATTCGAGTGTGGGTATATAAGCAGGGCCAGATGTCTCTG
TGTTAATCATTTCTACTCTTTAATAAATAACGGTGGCGTACAGTGAAAATAAAGCCCAGATGGCTGCACATTTGCACAA
ATCACTGGATGCACTGTATATTCATTTCATAGTTTCTGAACTAATAAGATGATAGAGTCATCATCTTTTTATCTGTT
CCTCAGTCAAATAACAAGTAACCTACTTACTGTGTCTTCTAAAAGCCACTGTGCTAGTGGCTAGGTAGGTTATAAAAAACC
CACCAGATATTGCAGATAGTACCACAATATAATTTGCTTTAATCTCTATGACCTTCAGAATCTATTACATCCTAGTCTT
CCCTAGGAGACTGGGGTTTCTTGAATTATTTTAAAAAAGTGATCCAAAACCTGGATCTGATTTTGCCATGGGGATTGCT
TAACTAATTGGTTTATTAGCTTGAGTCTCATGCATCATGGTGGATATTACTGGTTGTCAAGTTGTGGTTGGTGAATCGT
AGACTTTTGAAGTCTCAGAGAAATTCAGAGTTGACCCACATTACATTTTACAGATGAGAAAATGTGAAACAAATGACT
AAATGGTTTCTACTAGAGCCAGACAGTTACTGTGAGAATTGAAGCTTAACTACAGGCTGCTAAGTTGTAGTCTGCAGCT
TTTGCTAGTATGTATGTTACTTTGTCTCAGAAATGTAGTGAAATTAATGTAGTGAGATTAAATCGGTATCACAGGAA
TGAAGGTGCAGTAACTTTGGGTTTGTGCTGCCATTGACTCAGGGTGGGATGAAAGAAGGGGAACGGACATCATTTGCAC
CTGCTTCATTTGTTTGTCTTAGAAGGAAAATAAGGAAATGAGGTCTGGCTCCACACAGTGTTCAGTGGGGGCTTTAAC
TGGTCTAGATTATCTAGAATTTTCAATATACAGAACTTAATAGGCACAGACACTCAAATGATAGGGGAGTCAAGTAT
CACAAAGATATGACATTTACAGAGCCAGTCTGCAAGATAAAGATATGCTAAGTGGTTGTCTGTAGACAATTATAGTCC
ATTACAAGTTGAGCATAAAAACATAAGCATTATTCATCAGATACTGAATCACCAGTTAGTGCTGGTATTTAGATGAAAA
CATTTGGCTTGGAGGGGAAGCCCCCTCAAAAACCATAGTTTTGACTTGTCTTAAGAACCTGCCTGTATGGAAGAGCCT
AGACCTTAGTGGAATTTCCCAAGGATGTTTTACATAGTTGGGATTCTCAGTAGTTGATGATATTGGGAAGCAGAACATA
ACCAGGAGAGCTGGGAGTCAGCCCTGGCCAGTGAGGCCCCAACAGAAAAACCATACTCTGCCCTTCCCAAGTCACAATA
AATTGTGTTCTGCTAAGTTGTAGTTACACTGTCTCTTCAAACAGAGACCATAAATCTTTGTGCTCATTTTATTCAGTTT
TATGTTTATGCTAGTGATGTTTGTCACTTAGTTAAAATTAGCTTTAATATGGAAGAAGAGGGGTATACCTCTTCTGGAA
ATGTAACACTCAGCCTTAAAGGTAAAGGGAGCAGCAAGGTGTCCCTAAAAAGCAACTTGCATCCTGAGCACTGTGTGG
ATAGAGGCCACTGTTGCCAGACATCCAGCCTTAGCAGGTTGCAGCCTTAGCAGGTTGTGCTGTCTTTGTATGTGGTCAT
TTTGGTACCATCCAGAACCCCACTTACTCTCTGCTCCTCCACCACCACCTCCAGTCCCTGGTTGCAATGAGCCACAC
AAAACAGAGGAAAGTAAACGGGCATTACCTTAGTATCAGCAATGCTGGGATATAGTTCTGCTGGTAGCTCCTCCTAAAA
ATACACCCCTAAAAAATAAAATTGTAAGAAAAAAGAGTTAAAAATAAAAGTTTCAGTCTCCTTGCCTGGGCAGGTC

248/375

CTTGGAAGCTGTAGAGGATTTTAAAGGCTATGAAAATTTATTTTATGGAATTCAGAGAGGGGGATGGGCTCAAGTTTAT
TATGTGAGATACATATTTACTTATTTAATAGATTTGAAAATTTATTTCTATGTTTATTAGTCAGGGTTCTTCAAAGGAC
AGAACCTATATGATATATGCATACATAGAAAGAGATTTATTTTAAAGGAATTTACTCCCACAGCTACAGAGACTGAGAAG
TTCCAAGATCTGCAGCCAATAAGCTGGAGACCCAGGAGAGCTGCTGGTATAAGTTCCAGTCTGAAAGCTGGCAGGCTTG
ATACCCAAAAGGAGCAAATGTTTCAGTTCATGTCCAAAGGCAGGAAAAACCAACCTCCCAGCTCAGGCAGGCAGGAGG
AATCCTCTCTTACTTGTGGAAGGTTTTCAGCCTTTATGTTCTATGCAGGCCCTTCAGCTGATTGGATGAGGGCCATCCAAAT
GTAGGAGAGTAACCGCTTTCTCAGTCTACCAGTTCAAATGTTACTCTTATCCAAAAACACCCCTCACACACATACCCCA
GATGATGTTAATTAAATATCTGGGCACCCAGTGACCCAGTCAAATTGACACATAAAATCAATCATCCACCATGTATAT
TTATTCATATGTAAAATAGTAGATTTATGTAGGAAATAGAAAAATGATGGTTATTATTAGAGAGGAGCATAAGAAGGAA
ATTTGTGATTTGAAGATTTAGAGTCCATTATTGCTAATGACCATTAAAGCAAGAATCAAAAAATTTTGCCCTGTTATGAT
AATGATGTGTACACCATTCTAAAAATAATCCTTATTTACTAAGGCATCACAATAACTTCTATGGTCCATTTTCAGACAC
AACAAGGGCGAATCACCTTTTTCTTTTATTTCTTTGACTTCTGTTGAATATTTTTTATGAAAAATCTTGAATTTCTAA
GGGCATATTTCTTTTATCACTACAGGGATGATTTTGCCGTAATATCTGAAATAGCATTGCAAAATGATTTTCTTTAGCAC
TTTACAACCTGTAAAGAAGGTCATTTTAAAGGCAGTATTTAAAGAACAATGCCACAATAAGTGGCTCTTCTCATTTGCC
CTTACATTCTTTTAAAGAAGAGACCAGTAGACAATGGTTAAACCAGCATGTTTCAACAAACACATCATCATTAAAT
AATTGAAGCAACTTTCCAAAAGTATTAAGGAATTAATAATATGTAATGCTCTAGAATAGGAGAAGCCTAATAAGCCAAAT
AAGTTCAACTATGAAAAATATCTGTCAATTTTGTTAATTCACAAGCTGGAGAGGGTATGAATGTTAAGGGGATGTTGTA
GCTAGCCTAGAGACTTACTCTTAGGTCTAAGGCAGGTACTTAAATGTGAGAGTTGAAAAGAAATTTTTTTTTTATTATT
TTTCTTTTTTCTGAAGAAGTGGGTTTTGTAAAGCACAAGGATGTAGAGAAAAACCATGCTTTTTTGATTGAGACTGCAG
TGGGGAAGGTATGCAATTAACCTTATAATTTCTATGCCAAAGATTTTTTTTTTGCTCTTCTCTAAATATTTTACTAAT
ATCTTACGGCATTACAGATTTGGTCTCCCACTTGACAGGACATTTTTTGGAGGTTGTATTTTTTAATTTTTTTTTCAATA
CTGAAAAATTTATAGGGGAAATGAGAAGAGCCAGATGATGAATGGCTTCAACAAAGGGAGTGTGGTCAATATGACAG
TGATGGGAACAACGAAATGACCAAGGTCCTTGATTTCCAAGAAAAGTCAAATCATGAAGGCTTCATGTTGGAGGAGACC
ACAGAAGTGTGGAGACTCAGGCAGGTTCCGGGATTTTAAAACTCTACCGCTGGAGCAGCCTTTCCCTTACCACCACCCAA
ATGCACCCATAGAGCAGGGAATAGGGGTGAGAAATATGGAGATTTCCACTTGAAGGGTTCATGGGTCTAATTCAACT
CCCATTTTAGAGATGAAGCAGGTGAGTCTCAGAGAAGTGAATGATATATTCAGGACATATGGCTAAGGGGTGACCACT
GCAGACTAGGCTTCTTGACTCGAATTTTTTTTTTTTTTGGACTACATTGTATTACTCCCAGTCTATTAAAAAGTTTA
ACTGCCATATTGAACAAGCAAGACTCATAACAGCAAAGTCAAGAAACATTTGCCCTTCCCTCCACTGTCAATAAATCCA
ATAAAGAGTTAGGTCTTAGCATGCCAATGGGACTCTAAAAAGAAATCCTCTCTAGGATTTTTTGTCTCCCTTTGACCTC
TTTTAAAGGCTGTATGTGGGGTATAAGCTAACGGTCAGAATAGCTGCGCCTTTGCAAGTCTTACCAGATGTTGCAGCAA
CTCCAGAGTGTAGGAATATTTGCCATCTATTGTTTGTCTTGGCCTTGTAGGACTTCTACTGCAATAGAGACAAAG
AGCCTTCAGGAACATTCTGCTGTGCAAGTGGTCACCAAGTTCATGTGCATGACACTGCCCTGGTCATTTGCTGTCTGGT
TACTCTGCAACACTAAAGCCGATTGGCCTTGACTTAAAAATCCATTTCAAGGGAGGAGAAATAACATAAAATGTTTTAAT
CAGGGCAAGTTTTATTGTAATAAAGTAAATGACACAAAGGCAGGAACTACACTGCCCTATTGGTTATTATCACCTGTCT
GGCACACAGTAAGTCTCAATAAATGAATGAGTGAACAGAAACCTATTAATTGGATCAAGTAAAAAGAGACTTATTGGA
AAGATACAAAGTAATTTAAGAAAAATGTCATATTGGAAAAATAATGCCTGGCTTCATGGGGTATTCCCATCTTGGCATAT
TGGACCCATTAACTCTCAGTGAATCTCAGTGACCCAAACATGGCCACATGCCATGATGATGTGACTACAGTGCCCATCG
TGAATGAAGGGAAGCAGAAGCACTCTTGAGTGGCTGGGTGGACAGAACCTGGGTGTTGGGTGGTAGTGGGAAATAG
ATAAGGAGGATTAATCTGTGACATTGGCAGATGGCATTTTTTATTAATCTCAGACTATTGAGAGATACGTGGGAACATT
ATCTTCAATTGTAATATGATCTTCTTGAAGGATAGTTATTCAAATAAAAAATATATACTTTCCATGTATGAACAAATAA
TGTTGCATTTATTCTAATGTTACATTTATTCTAATGTAACTATTCTATCTTTTGGATAACTTTGCAAACTGAAAACT
ATTACTGAACAGTTTGAATTAATAAAAAAAGCTTGGAGTACTATAATATTTCATGAACAAAAATCTTGGAGAATTTCTTC
TTTAATGAAGTTATTGAAATGCTCATGCCATATAAAATTTTTCAATATTGAAAAAAATTAATAAACAACCTCCAAAAA
ATGTCTCTGTAAAGTTGGGAGACCAAGAGACCAATCTGTATGCCGTAAGATATTAGTAAATGTTTGGAGAAAAGGCCA
AAAAAAATGCTTGGCATAGAAATTATAAGTTAATGTGCATACTCTCCCACTGTAGTCTGAATTTACAAGATATATGC
CATGATTATTCTCTCAGAAGATTTTTTATGAGTTCAGTACTGTCTTGATTAAAGCTTATGACTAAATAAACTTCTTTTCA
TGACATTGTGCAAGAGTATCAGTTTTTCAGACAGTGAGAAAAGGACAAGCAGCTGGAATCAGCTGAGAACCAACAATCT
ATTGTAAAAATACGGTTTATTTTACCCTCGGCATATGTATTTCATACACATATATGTATATTCAACTGAGACAAAAGTT
TCACAAAATCCTGCTTACTCTTACTACATGTGATGATCTCTGATACATGTGATGATCTCTATTCTGTTTGTTTTAAAGT
TTGTCAACACATGAAATTTGTTTCAACCTTCTGTTGGTCATGAGCTCTGTTTGAATATGCAGACTCAAGGCAA
AAATGTAAATGGGAAATTTGGAATTATTATCCAGGTTGGAAGGATTAAAAAATAGAAAAATACGTATGATTTACCTTTTC
TTTCTTCTGAGGCCAGATAAAGGTAAGTCTGAAATCTAGTTATTTATTTATCTGGAATTTGTTAGGGTTAAACCATA
GCTAGTAAGGGTAGACTGTGGATGTAGTACAGTAGCTACTTAAAGCTGTTATGTCATGAGCCTCCCAACCATGACGGT
GCTTAGGAACCTCTCCAGGGAGCATTTGTAAAGTATGCAAAAGTCTTGGAACTCTAGGCCAAGTGATTTAGAATCTCTGA
GCATGGGGCCTGAGCATCAGTATTTTAAAGAACTCCCAGGTAATTTGTAATATGAAGCTAGGACCCAAACCATCAATA
GCAACTCTGAGTAGATGCCTTTGCCTTGTGCACTGAATACTTTTGTGATGTTAACAATGCTTTTTTGTGATATTTTATG
ACGTGTTTCTTGTGTATCACCAAAAGCAACAGATAATTTTGAATAACAGAGGTTACTATGAGCATACAGTATGACACA
TCATTGACCTCAAATTTAAGATACTTATTACTAAAAATGTTATATCTGTGATTTATTGAAAAATTTTATGAAGAATTCAT
TGACAGGAGCAGGTATATGTGTAAGTGCTACTTTTCTAGTTGAATGTGGCTCAGGAGAAATCTAGTTAACTAAGTCAAA
TAGATAGTTTTTAATACTTATATTTATTTAAATAGTAGACTTCCATAATCCTCAGTTATTTTATGTCTTCCAAAACCAA

249/375

AAATAATTTCTTTAATTTTGTCTAGATTTTAAATTGAAATTGGTGAACATATGCACACATACACAAAACTGTAGATTT
AGTGTCTGTGGTATGTAATTGATGAACTGTTTCTAAAAGGATTTTGAACGTTTAGAAAACTAATTAAGATATTTAAAT
TATTGACAAATAGAGGATCTTTCTGTACCCAATTTAAAAAGAAGATACAATGATTTGTGGTGTAGTATCCATTTTTC
AACATAAACAGAACTTCAGAAGTTCTTAAAAACAGGTTGTCCTTTTAGATAAATTTCTACATTTCTCTGAAATCTTAT
TTCTGAATTAAGTCTAGATGTTTACAATCTATCTGAAAAAGTAATGTTGTTATAAACCTCAAATCCGTGCTCATACAA
ATTCTTACCATTTCCAATTAGATAAATACTCTGGCAAGAATTACTAATGCCGTGAAAAATAGATGTAAATATTTCCCATAT
GATGGTAATTATTAATGTTATCAACTAAGTATAGTGTGTTGTTTAAATTTTAACTTTTATTTTAGATACAGGGGGCAC
ATGTGCAGGTTTGTACATGGGTATATGTTATGATGCTGAGATTTGGAGTATGGACTCTGTCAACCCAGATAGTGAGCAT
AGCATCCAATAAGTAGTTTCCCACCCAACTCTCCTCCCTCCCTTCCCTTCTAGTAGTCTGCAGTATCTGTTGTTCC
CATGTTTCCGTCCATGTGTACTCGGTGTTTAGCTCCCACTTACAAGTGAGAGCGTGTGGTATTTGGTTTTATGTTCCAG
CATTAATTTGCTTAGGATTATGGCCTCCAGTTGTCATCCATGTTGCTGCAGAGGACATGATTTTGTCTTTTTTATGGCT
GCATAGTATTTTATGTTGTTTGTACCATTTTCTTTATCCAAACCACCCTGATAGGGTGGGTTTCATGTCTTTGC
TATTGTGAACAGTGTGGAGATGAACATATGAGTGCATGTGCTTTTGGTGGAATGATTTGTATTCTTTGGGCATATAC
CCAGTAATGGGATTGCTAGGTTGAATGGTACCTCTGTTTAAAGTTCTTTGAGAAATCTCCAACTACTTTTCACAGTGG
CTGAAGTAATTTACATGTCCACCAACAGCGTATAAGCAGTCAATTTCCCTCCACAATCCTGCCAGTATCTGTTGTTTTT
AACTTTTTAATAATAGCCTAAATGTAGTATTTTAAAAATCTAAGAGTTTCTTACCTGAACCTAGCCAATGTATTTTTT
CATCTTATTAATTAACATACACTTTTATTTTAGCCCTCATGATTTATAGGTATATAAGTAAGCATATTTTGTAGAGA
TTCTTTAATTTTTTTTTTTTTTTTTTTTATTTATCTAAGTTTTAGGGTACATGTGCACATGTGCAGGTTAGTTAAT
ATTTTATAGCACTAATATGTCTTTGTTTAAAAAGAAATAAAATTTATAAATGTTTTTATAAGAGTAAATCAATGTAA
TAGCTGCTGCTGCTCAGTACAATTAACAAGTTACAGAAATCCTTTACTCAGTATCACTACCAATTTTTTCTAATATT
CTCATTTTTAATTTTTTGTAGGTGGTTTTTACAGTTGCCCTTATATATTCTGTCAATTGTGAATAGAAATTCAAATTCCT
GAATTTGATAATTGTGTCATTTTTGTGTTCCCTAGCTTTTATTTGTAGACTGTTGGTCTTATTGTTCTTTTTCATGTGT
TACTATTATCTCTGGATATTTTCTTATAAATTATTGAACTTATGAGATTCAATTACCTTCCAAAGTGATTTATTGTTA
CGTGCTGTAATGCTATTAATAAGTGTAGTTTGCAGCAATGTTTCAAAATTTTGTCTACTTAAATTTAGAACAGGATA
TTTATTTTGTAAATTTTGGATAGATAGAAAATCTCCTTTCTGCCATCATGAACTGATAAATGAGTTATAGGGATGGGA
GGAGATGGACATTTGACCACATGCAATGCAGTTTTCCAAAGTATATAACCATAATCTATATTAAAGTAAATGCAGTGT
CAGATGGGCATTACTTTATGCAAGATGTGTTGCTCATGAACCTTACCAGCCAAAGGAGACTATCTCTCACTAAGGCTTA
TGTAAAAAGTCCAGGAGAGAATAATTACAGTGGGAGTAAATTTGAACACATGCAGTAGAATGTCTAAAAGTTAAGCTTC
TCAGAGAAAATGTACATATGCTTGGATTTTACAAATGATGTATTTCCAGGTATTCAGTAGGCCCTGCTAAAATAAGTTAG
CATTTTTTAAAGATAAAATATGTTACTGAAATATATCCTACATAAAGTACCAGAAATATAGGTTTACAGTTTGATGAATTC
CTGCAAGTGAAACACATCTATGTAATCTCCATCCTGATCAGGAAATAGAACATTTGTCAATTCCTCCAGAAAGTCCCTGGT
ACCATACCCCAGTCCCTCCACCATCACATAAGATTAGGTTTTGTCTGTTTTGTTTTTTTACCATTTTGTGTTCTT
GGTGAGAGTGCTGCTTTTCCATAAGCAATTTCACTGTATCCAGAAACAGAACTCAGTTAAATTTTAAAGGCCACTATTTT
CTTCATAAAATAGAGGGAAGGGAGAATAGGTTGGTGGGAGGAACTCGTGCTTCTGATTCTTTCCCTAGCCTATGATCA
ACATAATCATGCCTTAAGAACCTTGCTTCTGTCTTTGAGTGACATGCTTGGAAAAGTTTTGAAAACATCAGTTTGTG
TTCTTTACATAATTCATTTGATAAATCTATTTTATATGTTATTAATAAATGGAACAAACAGAAATGTGGAGGGGA
AAAAAAGAGAAATTTTAAAGACAAGCCTGCCCTCTAATTTTCCCTTTTGGCCATGAGTAGTACAGGAAAGACTCTGGGAG
CTTGGGGACATTGAGGCATACAGCAGTCAACAAGCCTGAGCCCTACAACGACTGAGTCTGGAAGTTTATAGTTCTGAAA
GCCTAAAAAAGCACTGTGTAAGAGGCTAAGCCAACCTTTTTGTTGTTGTTAATCTTTTTTACTGGGAGACAAGAATGGAC
CTTAGGGATAGGGTAAAAAAGTGAAGAGCCCCAGCCCTTTAAGATATTTTCTCTAAACCTCTTAAAGTTAACTCTGAT
TAATTTCTTGGTTAGAATTCAAGTTATGGTTCTGCTCTGCAAACTAATAGGTAGTTTAAAGGTGGGAAAAAGTAAAAAT
TCTTGCCATCTCTACATTGACTTGAGAGTGAAAGTAAGACTACAGATTTGTTATCCCCAAGACAGTTGTAGAAAAGT
AGATTATGCTTTTATAATACCTATTTCAAGTGGGGTAAATATATAACCATGTTTCTTAGCCTTATTTGGGGTTAGAGAC
CCCTTTGAGAATCTGAATAAAGCTATATGTTCTCTGAAAGGTGTACCTAGGTACACATAATTTAGCCACTGGCCTTG
TCCGTTTGCAGGCCCCGTAAGCTAATGCACAGTTTCCCTCTGAGGATCCCTCAGCTTATTCTAAAGTCTAAAATTTCTCT
AACGGTTGCCAGTGGAAATAATCCAGGAGTGATAGAAGTATGGTCTTTATTACAGTTATCTAGGAAGGAGACCACACTG
TCTTCATCTTTACCCTTCTTGGTTTCACCTTCTTCTTCATGACTTGAAGATTCCTTTATTTTTCTCTTACTTCCAAC
TCAAAATTTATTTGGTTTATGCTGGTTTCTTTGTTTAAACAGAAATATTCCTTTTGCAAAATGGTAAACACCTTTTTAG
GGGAAAAAAGCAACCAACACTGTTCTTACAGTTGTAGATAGTAATTAAGTCAAAACCTTAGTTGGTTTTTCATTTT
TGAATTTAATACTGCAAAAAATTAACCTTTTTTGCATAAACTTTTTATGACTTCAGTTATTAATATTTTATTATTTTGA
TTAATTTTATGTAAGTCAAGATAGTCTAGGTTATTCTGCAGTAATCCAAATCTAAGTGGCTTAATATAACAAATTTTA
TTTCTTGTCTCTTCATACATACCCAAGAGGGATTGGCAAGAGGCTCTACTTATTGTAGTAAACCTGGGACCCAAGATG
ATTGATGCTTTATCTCAACTCAGGCTTCTTCAACAGGGAATAATGATGTAAATGAATCCGTCACAGGTTGCCTGAACTTT
CACTTAGAAGTGACACATAACCACTTTTGCTTAAAAATAATTTGGTCAAAGTATATCCCATGTTTCATGAGTACCAAGG
GGAGGCTAAGGGCAATCTTACCATGTGACCAGAAAAAGGAAAGCTAGAAGTATTTGGGTAGACATTCACCTCTTTCTG
TACTCCTTTTCAAAATCTCCTAATTTTTTGGAGATTTGATTGATGTTAAGCAGAAAAAGAGGGTTTGGAGTCTTATTTT
GGTGAAAAGAAAATATTCTTGGTTAACTTTGTCTATATAATATATCTGAACTTAAAAATAAGTACACAGTGGCATATAATGA
ACTTAAAAAGAAAATAAAATACTAGCAGGAATGTAAAAAACCTGAAACATAACACTGAATTGCTCTTGTGTAGTGTATGCCA
CTTAGTTCCATCTACAGTCTAGCCCTTGTAATAACACACACACCGTGATTTTAGTTAAATAGGAACATGCCCTTTCTG
TTTCATTTAAATTTCTAGTCAACACAAATCTTCTAGAAAAATGAATTAAGAATGAGTACTATTCCAGAGTACATTC

250/375

GGTTTGTCTATAAATTCTAAGCTAAGCTTTATATGGGAACTGTCAAAGGCACAGTTGCAATGTTGCTGCCTTTTTTATT
CAGGAGAACTGACTTCTGTTGTCCCACCTTGGACTGATATGTTGAGTGATGAAAAGCTGGGCAAATCTCCTCAGTCACCTT
TCTTCTGATAGTTTACTTTATGGCTTCTTAGTGGTCTGCATCATTCTTTCAGCCTGACCATTGCTTGGGGTGATGA
AGAGTAATGATGACAGGTTAGATGAGCTCTAGCTTCAAAATTTCTTAAATGCATCTGAAACAAATGCAGATTCAATTGT
CAGGAATAATAACATCTGGGAATCTGGACATTGAAAATCATTGGTACAGGGATGTTCTTGTGTAAGTAGAGACACTATA
AGGCATTTTGTAGATGGTAGCCACAACAAACAAGAAATCTCCTCCTTGAAAAATAAAGAATTATTGATCAAATCTTCC
TGATCATTTTTTATAGGAAGGAAAAGTACCTTTGGTGGATTATATGGAGTGGCTGGTGTGTCTACAGTCTTCTAAAT
GACATAATTAAGTACAGGCTTTAGATATAATTATTAGTGTATATATCATTTTAAAATTTCCAGGTGAATTGTAAACATT
ATTGTAATAATGTGATAAGTTATGTGATTTCTCTATTCTGGCCACTCGAAATTAAGAATTAAAGCTTTGATTAGAAATT
AGAGTCTAAACTATATATTTGAGAGGCATTAGTATAGTTGAAACTATGAGAGTATTTTGGTTTACTGAGCTAGTTTATG
TGAGAAAGCAAAAGACCTGAAACAGTCTTTTTTTCAGTATGTATTGTATTCTAGACTTTTTTCTAGGTCAATCTTTCTTT
CCATATTTTCTCTTTTTTTTTTTTTTTTTTTTTTTCATGAGAAAGCAGAATGATTCAAACCTGGGTATAACTATATTAAAGGC
CATGAACCTAGCTTTTGTCTGACAATAAAAGTCATGCTCTTATTGCTAGATTAAACTTCCTCCTGTTTATAGTGTCTGAT
GGGATTAAAGAGAGAGGATCTTATGTAAGTAAGAAAGTAATCTTTTTTCTACAATCTGCTTTTAGCCCTTACTTTCTCTC
CTATGTTGAGAGCATTTCTAGTCCAAAGTTCTTTTTTTTAAAGTCATTAAAGATGTATTATTCAATCTCAAGTAACTTTAA
ATCCCTTTGTAAAAATATTAGCTCTTTAATTAGGCTTGGTGTGCCTAGCCAGCTGTCTCCAGCATAATTTTGGGTAGGC
ATTAGTATGTTAATATGGAACCTGGCTTATAATCTTAATTTCAAAGCATATTGGAAGGCAAGTTTATGAATAGTATAAA
GAGACTTATATGACCTGTCAAATCAATTCATAAAATTCCTATTTTGAAGGGGAAATTAAGTCAAGGTAATGGAAATG
TTATATTCGTATATATTCGCAAGGAGATGAATGACATGGATAGGATGTCTTTGAAAGTTAATGAGAAAGCTACTTGCAGGC
AAGTTGTTTCAAGGCAATGTTAGCAAATGAAATGGGTTGCTGCCTTTGGGGAAATGATTATGATAGATGAAACCATCT
GGGTTTAGGAGGTTGGTTGATGTGACATACCTCTCTTCCAGCCTTTCCACTCTCTCTTCTTCTTCTGTCGCCAGCATAAA
ATCAGTCTTTGCGTATAAAGAGCGCTATGCAAGTTGGCTTCCAGTCATACGAATATGTGGTATGATTCAAATAAGATT
GTCATTGGATGCTTTGGTCAGCAAGCATATTTACTTTAGATTGTATTTACTCTTTGTAGTTGAACTGGCTAAACTCTA
ACAAAGTATGCTTCATTTGACTTTAATAAAATATTATATTTCCAAGACCGTATGTAGTAATAGCAGAAGGTGTGATTTCT
TCTTTTTGTCATAAATTGGCTCTTCCCTTCTCTTCTCTGTGTTTTTTCACATCTCCCTACTGTATATATATTTCTGACCT
GCCTCTGGTAGGGCTATTTATGTCATATCCATAATTGTTATATATTAACCATTTGAATGTGGAATAAGGCAAGTACAGT
TTAATTTTTTTATATAAAAAATATGGAATATACTGTAAATGAGTTCTCTTAATCACGGAGTAGCTACCTCTGGAAGCTG
TAACTGTTGGTCTTGGGCTGTAATATATTATACTACAACCTTAAAAATGAAGAAAACAAAAAGACAACACTCTATGTGC
TGCTAGACAAAGGCCACAGTTAAAGCCAACTGCTTGACACTTTATATTCTTCAGGCCTTTTAAACGACCTTCCCTTTG
GGTGATGCATTTTGTAGCTGTTGTCACTTGTACAGCAGAGAGGGGAAAAGGAAATGAATAATCTGATTGGAAGGGTGT
GAGGGATGTGAGTCTTAGGAAGATCCTTAGGATTTACAGAAGCTATAAAGCTATTTGTGCTGCTTTGTGGTGTCTTGCA
CCCTGTGTCAAGTTAATAGTTTATCTTTACCCCATTTTATGCTCTAAGATATAGATGATGTTTTAAAAATCATTTCTCATA
GTCTTCTTTCCCTCAAGCTCCACCCCAAGTTTTCTAGCTCCTGACCAGCACTGTTAGCTTTTTTGATTAACTTCTCACAG
TCTTCTCATTTATGAAATACAAAATGAATGCTATGTCAAGACAGACTTGGAAAAATCTTTTAAATGGCAATACAGGCT
CACCTGCAATTAAGTCAATCCATTCCATTAGTGTCTTTTTCTTTTTCTTTTGGAGACAGGGCCTCACTCTATTGCCC
AGCTGGAGTGCAGTGGCAGGATCATGGCTCACTGTAGCCTTGACTTCTGGGCTCAAGCAGTCCCTGCTGCTCTGCCT
CCCTAGTAGCTATGACCACAGATGATGCCACCATTCCTGGCTATGTTTTTAAATTTTAGTAGAGACAGGGTCTCA
ATATGTGGCCTAACCCTGGTCTCAAACCTGCTGGGCTTAAGCAATCCTCCCACCTCAGCCTCCCAGAGTGCTGGGATTTTG
GGATCCCAGGTATGAGCCATTGCACTCGGCTCCATTTAGCTTCTGATGAGTGTAATATTAACTTTGAGGTCAGTTTAC
AGTTTGTGATATTAGGACTGATTTTTTTTTTAAAGTTATATTTCAATTAATAGTGGAGCACCTTAGGAAAAACAAATCTC
TTTATATATAGAATTAAATTTGTGAACTTTTCTGAAGTACATTTTTATCCTTTTAAATATGCCACAACATCTATCCTGT
AAGTAAATAAATATTTCTAAATGTCTAAAGCAGAGAAATATTATAAATTAATTAATAATTTCTGAAAAACAAAGTA
AATCAATTTCTCAATTTACATTATTAGATAAAAAATAGCTCAAGAACTAGCTAAACAGTATTAGTGAATTAAGGTCA
AGAGATGCTAGAAATTAGTCAACTCAGGTTTATGGAAGATCTTACTATATACTCTGTAATATTCAAAACTATTTCTCGG
CTTAATTCACCTGATGAAATTATGGTATTTTGGTAGTTGGAATTACCAACTGTCTGCAACAGCATGAACTGACAAGAAAA
TAGTGCCCTCTATGAGTAGGAGTACAGAATGTTATCTTATTAACAAGAACCAGGGGACAGTAGGAATGGACAACAGCAT
TGGTTAGTGGCACAGACCAATTCAAATAATATATTTTGTGTGATTTTTTTTTTCTTACCAGCAGTTTGTGTTGGTGAGGC
AGAATTAAATAGGGAAGAGAAATGCACATTCCCTATCTCTGTCCCTGCAGTTTCATTAAATTTGACCAAATFATGTGA
CTCAGCATTTCTCAGAGAATAGTCTCTGACAGGTAGCACTTACAGGAGACAGACCCACACCTTCTAGCATGTGATTCTTA
AACTCTGTGTGCAGACTGGTGGCCAGCTAACACATAAAATTTACCAGGGGTGCTTATTAATAATGGAAATTCACAAA
TCTTACCTCCAGAGATGCTATCTTGGTGGGCCCTGAGAACATCATGTTTTTGACGAAGTCGCCCAATGCCTTTCTGGCG
TGGTCAAAAGCAAGAAGCACAATGCCTTTTTGTGCTTCTTGGTTTTGACCAAGTCACCCAGATGATTGTGGTGCAATGC
CTTTTTGTGCTTCTGCCTTTAGCGTTGGTTTGCCAGCCAGCACCAGATCAGGCAGCTCTATTAGCTGCTGCTATCAGC
ACGTGGATGTTCTCTCTCTTTCGTAATGAGATCTCTCTCTACTCTCCCAAAGTCCCATATTCTTTTGGGACTCTTCT
TTTTGTAGCTCTTGTCTGTGTAAGAATGGAATGGGAAATCAATTTCTATGGAGGAAGTTTTTCTTGGCTTTTGGTAAAC
TGACAGAGTGAACAGATTTCTTCTGCTGGGTATGCACTGTGCCTTCTCCACCTATTCCAGAGCTGTCACTCAGGAGCAC
TGTTCAAGGCCATCCCTGCCTTCTTGTGTAGAGGGCTTTCTGTGACCAGCAGACAGTCAAAGACATCGTATCTATAC
ACAGATGGCACATTGATGAAAACCTACTGATGTTTGCCACTTATTATTTATTCTTTTTTCTAAATATTTACAAAAATTA
CTTTTCTCTTTTGTATGCCACATCTGACTATGTGTGTTAGTTTTTGTTTTTTGTGTTGTTGTTGTTGTTTGTGAGA
TGGAGTCTCACTCTGTCAACCAGGCTGGAGTGGGTTGGCTGATCTCAGCTCACTGCAAGGTCCGTCTCCTTGGTTTCAT

251/375

GCCATTCTCCTGCCTCAACCTCCCAAGTAGCTGGGACTACAGGCACCCGCTACCACGCCCTGCTAATTTTTTTGTATTT
TTAGTAGAGACAGAGTTTCACTGTGTAGCCAGGACGGTCTCGATCTCCTGACCTCGTGATCCACCCACCTCTGCCTCC
CAAAGTGCTGGGATTACAAGCATGAGCCACCGCACCTGGCCGTGTGTAGTTTTTATATCTATGTTAGTACCGCAAAAA
TGTCTAAGAAAGCAGACCCCTTCTACCAACTACAATGTCTCATATTGCAGGAGGCCTCATAGTTAGGAAGACAACGTGT
TAGCAAAGCCCTTGTCTCTCATGAGCCACAGTGTCTGGCATATCTCAATGCACCTCTTCATGATGCTCTAAGCTCTA
AGTTAGGCCTATGGTTGCATTGAAGCTCTAAGTTAGGCCTATGATTAAAGTCTTCTGGCTCATAATGATAAAAGCCATT
ATTGTAGGCAGTTAGAACCTGTTGAAGGACAGAGACGTGATGGATTACAGTCTGAGATAATGTAAGTTGTTAAAAAAG
TGAAAATAAAAGAAAATCAAACTTTGCTTTACCTATTCATTTTTAAAAATAACCAAGGCATACCCCTTTTGCTGTCTTA
AGTTTTCAGACAAGGGTGCAACTTCTACAGTCATTCCTTGGTGGCTTTACATGCTTTATTTGCCATGGGCCATTAGGTGC
TATGGGTGTTTTTCATCCCCACTTTGGTGCTTTGTCAAGACATCAAGCATCTCCATGAATATACTTTAACTTTCCCTTT
TTTGTGTTTTGTTTTTTAGGTAAGTACTTTTTGGTATTCTTCTTCTTAATGCTGAAAGAAAATGCAGCTGCCTGATGTA
GAACAAATGGCTTTTGAAAGCAAAATCCAAAAGATAAAAAATAATGTGAACAGTAAAGAATGACACCATAACCAGATACT
GGTAAGAATTTAAGTGGCATTCAAACACCCCTCTCTTTTTGGAGAGAGGACTAACAGTACAGGAAGATGCGGGGAGGG
TGGGGAGGGATTGTTGCCGTGCAAGTAAAAAGAAAATTACAGACAGTGTTCATGAAATATTCATTTACACCTGCTTATT
GGTTAGATGAACAGCCTTTGGTCTGAGCTGGCTCACCATTCCAGGCTGGAAATTATTCACTTAAATGCAGCTTTTAA
ACATTTTCTTAAATCCTCAATGGAAACAGATGTGCACATGCTGAGGGAACTTTTTTTTGATCTTTTTCTAGAAGAGGG
TTAAATTTAGAAAAAAAACCATGATTTTTTAATATTTAATTTTCATGTGTATAGCTATGAGCTATATACTTAAATGCTTT
GTAACATATGATCATGAATATATGTATATAAATTCACCCAGAAAAATCCATAAAGCTTTTGACAATAAATGTGTATAATC
TGGATAAATGAATACCAGTGAACCTCAAACATAATTTATTTTCATGTTTTATGCTTTCTCTTTCTCATTTTCCATGTACA
ATTCCTGTGTACATATGAAATAACATACAAAATACAATTGTACGTATGCTTCAATGGCATTTTGCCCAAATTCATAGTC
CTTTTTTATATGGCCGTGGATTTCGAGATTTAACATATATGGTAAATAGTATGTTTCTGTAACTTCAGCATAGCCCT
TTTAGTAACAAGACATTGTTTACTATAAATTGAGATTATCTATCCAATGTGAGTAAATATATTATTAATAATACATTAA
CATTTAAGATGAACAAATAGCAAAGGTAAAAGGTTTCAGAGACCATTACCTGTTACTAAATCATTTCTCTCTCCCAT
TACTAGTCTTATCTCATTGAGTTTCTGCTGTCTCTAGAATGTCTATCCCTCTGTCTCTGCTTTATTTAGTTTTTGTCTAT
ATTCAACTCAGACCCTATATCATGTACAAAGCTTTCCTCAAGTCTTTGAACACAGACTGGTTTATTCCTGCCCTAAAT
CATTTTTTAATAGAATCCATGTGTTAATTTTCTGAGGCTGCCATAACAAAGTGCCACAGACTGCAAGCGTAAATAGTAG
GAATTGATTTACTGATAGTTCTGGAGGCTGGAAGTCTGAAGTCAAGAGAGCAGGGTTGGTTCTTCTGAGGCCCTCTCTC
CTCAGCTTGTAGATGGCTGACTTCTCTCTATTCTTACGGGGTCTTTCTCTGTATGTGTCTGTGTCTTAGCTCCTC
TTATAACAACGTCACATTTGATTAGGGCCACACTTATGACCTCAACTTAATCACCTCCTTTAAACCCCTGTCTCCAAAT
ATAGTCATATTCTGAGGTACGAGGACTTCAACGTACAAATTTTGGAGGTATATGTACGAGGACTTCAATGTATGAATTT
TGGGTATAGGATTACCCCGTAACAGCCCATGTTAGTTTCTCACTTCATTATTCTCTGATTCTTCCATGTATATTGGTT
CTATCTTCCCTAACAAGTTCATCAAGGATAAGGATTGATCATATTTCAAGTTTTGTTTACTTCATTACAGTTCCCTAGA
GGCTGGCATATATAATTAATGCTACATATTGTTGTTGTAATTAAGTTCAGGAAAAAGTAGCATAACAGGACCAATGAG
AGCCTCTTTTTTCCAATATTGCTGACTTTAGCTCCCTTATCTGGACAGAAAAAACAGTAGCAGAGGTTTGAGTCAGGC
AGTGGTCAAATGAAGTGTCTCTGCTTTCTTTCTGGGAGGCCAACAGCATTCTCGTCAGCAGGAGCTTCTGGCGAAG
GAAATGCTGATCTCTGCAAATGGGCAAAAGTGTAAGAGCATTGAACCCAGCCTCATACCACAGAAAAACAATTTGGGCT
TGTGGAATAAATTACCCAGTGAAGAGTCTTCTGAACTAGAGGCAGGTTTTTGGAGGGGGAAATCATAAACACATTTGT
GGTTGCAAGGTAGCAGATTGGGTGAGCTGAACTAAAACAAATTTGGTTAAGAAATTGTATTTAAGTTCTGAAGTC
ATACTTAATTCTTAATAATTCTAATTGTACACACGCTAATTTAAATGGAAGATGTTTACTTCATTAAATTTCAACACT
AAAATGCTGGTTTCAGTTTGTGATTACTTTCTTCAAGTTTTGTTATATTCTATTTTTTATAATTTCTAGAGCCAGCAT
TCAAAGTAATTTCTGTGCTTCAAATAGGATCATCTAAATTCAAATTATATGTAAATGTCAATTGAATGCAGATATAA
ACATGGTGCCACAATTTTATAGAAAATTCTAAAAAACAAAACAGAATAACCATGTTGCTCTCGTACCAAACGT
GTCTTTGGGTGGGTACTAAGTCCACCTGAGTCTGAGATTCTCCATCTGTAAAAAAGGAATCAGAATACCTACTTTGGG
CAGTTGCTGATATTAAATTTAAATAAGCAAAGCAGTTAGCCAGTCATGTCAAATAGTTGAGCCCAATGAATGGTCTT
TTTCTTTATCTCTCTTCAAGTTGAATTTTGCACAGTAGATAATCCATCTATCACAGAGGTGTGCAGATGTGACTGATTC
ATTGATTGAAACATTCATTGCCCCATTTAAACAATGTTTAGGTATTATTATCCACTGTATCCTGGTTTTCATGCTGGATG
TTGGGTAAATAATGATGAGAAGAAACAGACAACTCCAATTTAATGGAGAAATTGACATTAAAAGTCTAAAAATATGTA
TAAATTTTAAAAAATCAGTGTGTGTAGTAAATATACACAGTACCAGGAGATTTTATAACAGGGAGGGTATGTGTAAA
ATGTCAGGAAATATTTCTCCTAGGATGTAACAATGAGGAGAGTTTCAGAGTATGCATGTGTGCACATATGTGTATGTGC
ACATGTATGGATATGTGTTCCAAAAGTAATAGTGGTTAAGGTGGTGATGGTAGTGGTGGTGTAGGTGGTGTAGGTGGT
GGAGAAGCAAGAGAATGAAATAAAATAAAAGATGAGTGTCTGGGAACAGCATGTGCAAAGTCTGATGTAGGAAACAGT
ACTGAATGGACAGTACGGTTTACCAAGGGAGGGCTGGTGAGGCTGAGATGAAGAGAGCTAACAGGAAGCCAGTAACTTG
AGATGAGGCTAGAGAGGAGAGCAGAGGCCAAGTGGAGCAAAACCTTATAGACATATTAGGTCTTCTACCTTAAGAACA
TGGGAAGCCACCTAATTTTAAAGAGAAAGCTTAATGGATGTGTGTGTTTACGTGCAGGGAGTCTACCGCTTTAATCCCT
CGAAATATCCTGCTAACCAGGTTGGCTTTAGTGGGTGGAAAAGTGAGGCCCATACATATTCAAATTTGTATTTGAAAA
GATTTTTTTTTTGTCTTCAATGCTTTTGCCAGAATATAGAAATTCAAAGTATGTGTATTTATAGCAAATACGTAGATG
TTTTTACCTTATAGGTGTGTTTTTATCACATTATTTTTGCACATATGATTCCTGTCATGACCCGAGTGAAGGGTGGGT
TGCCCTCCACACCTGTGGGTGTTTTCTCATTAGGTGGAACGAGAGACTTGGAAAAGAAAAGACACAGAGACAAAGTAT
AGAGAAAGAAATAAGGGGACCCAGGGAACAGCGTTACAGCTATGGAGGATCCCGCCAGCCTCTGAGTTCCTTTAGTAT
TTATTGATCATTCGTGGGTGTTTTCTCTGAGAGGGGGATGTGTACAGGTCACAAGGCAATAGTGGGGAGAGGGTCAGCAG

252/375

ACAAACACGTGAACAAAGGTCCTTGCATCATAGACAAGGTAAAGAATCAAGTGCTGTGCTTTTAGATATGCATACACAT
AAACATCTCAATGCTTTACAAAGCAGTATTGCTGCCCGCATGTCCCACCTCCAGCCTTAAGGCGGTTTTTCCCTATCTC
AGTAGATGGAACTGCAAGAGGCATGCCTTCCTCTTATACTAATCCTCCTCAGCACAGACCCTTTACGGGTGTGCGGCTGGG
GGACGGTCAGGTCCTTCCCTTCCCACGAGGCCATATTTAGACTATCACATGGGGAGAAACCTTGAACAATACCTGGCT
TTCCTAGGCAGAGGTCCCTGCAGCCTTCCGCAGTTTTTGTGTCCCTGGGTACTTGAGATTAGGGAGTGGTGTGACTCT
TAAGGAGCATGCTGCCTTCAAGCATCTGTTTAAACAAAGCACATCTTGACACAACCTTAATCCATTCAACCTGAGTTTG
ACACAGCACATATTTAGAGAGCACGGGGTGGGGGTAAAGTTCACAGATTAAACAGAATCTCAAGGCAGAAGAATTTTC
TTAGTGCAGAACAAAATGGAGTCTCCTATGTCTACTTCTTCTACACAGACACAGTGACAATCTGATCTCTCTTGCTTT
TCCCCACACCCGAGATCTTTTAAATATTCTAACATACTCTTATGTTCTAAATCAGTGACACTTAGAAAAGAAATGTTGACT
TGAACATCCAAGTACAGGTGCTAAATTTGACCTAGCAGAAACATTTTTTAAAGGAAATCTCTCTGCACTGAGCACTTGCAT
TATCTAGCAATGGAAAATTTCAAACAATAGAATGATTATCATAAATTCCTTTGAATACCTTTGTTAGCAGAGATGAAACC
TTGGCCACCTGGCTTTAAGGGAAGCTTAATGAGCATGTGATTGAGTGCAGGAGCTGTTACCTCTCTTAATCCTAGAAA
CATCATGGGAACACAGGTTTGCATCAGTAATGAATTTTTATAATGTGAATCTTTGATTTTCTTCTGCTGGTAAGAAACCT
TATTTGGAGATGCTATGTATGTGAGTTTAATCTCATTTTCCATTCTTCTGAAGCTTTCTAGGTTAACACACCTGAAAC
AGTGGTTACTATAATCAGTAAAGATTTATAACCAAAGTATAAGGAATTTGGGAATTTCCATATGGTGTGTCTCACAAA
CAAACGTCATGTTTCAATATGATATGAATGCATCTCCATCCAAATTATTATTTTAACTGTATATTTTCCCTCAGTCAG
CAATTTATGTAAACACATATATTTTCAATTCATCCAACTCCTAATAAGAGACCCCTAAATTAACCTTGAACATGATTTAC
ACCTTCTCAATATACAGTCAATAATTGAATTTAATGACTAACCAAGGACATTTTAGTCATTGCAACTGCTTACAAGATT
ATATGTAAAGGATTCAGGAATAAATAGAGGGGTCTCTCAGTATGAAGTTTAAATAAATACTTAATGATAAAAGAAAAAT
TTGTCTGCAGTTTTTTTTTTTACAATTAACTTTTTACAAGTTATTATCCCCTTAGGCTCATTCCATTCTGCTCCCTTTG
TTTTGAAACACTGTTATGACATACTACTGTGAGTAATGGAATGTGAGAAATAGTACATATGAAAGACACAGTTCATTC
TACTGTTAAATATTACATCAATTGAAGGTTTTAAATCCTAAGACGTATCTTTGATTTACCAGCCCAGCCCACTTCCCTAT
TTGCTCTCTGCTCCATTTAGTAGATTTTATGCTGGTTGCTGGACTAAACAAGTCAAACACCTGCAAGGGCCCTCCATCT
GTGGCCAGAAAAGTGTGCTGGTGGTATATTTTGTATGTTTAGGAAGAAATATTGATCTGCTTAACTAAGATGGTCATA
AGATAATATGGGGTGTACTCATCTGATTTCTCACAAAACCCAGGGTGTCTCAGAACTATACTGATGTGTTGGAGATGCT
ACTTAGGAAATTAGAGGACCAGCATGCATGCTCTTGGGAATGATGTATGCCACCCTATCATCTGCTTGGCCAACAACCTT
GAGCCAAGACACACCTGGGGTATCTTGGTACTACCTAGAGACCCTAGCTAATTTTGGCAGGGTGGATTGGTAGAATCCA
AGGAAATAGTTTTGCAAGTGACACAATTTGGTGGATGATATAATAAGATAATGAAGACTAAATAAATTTGAAGAAGGGAA
ATTGAGATAAATTTAGGCTAAGTTGTTCTATTGCTATTCTTAGAAGTGTTTTCTTCACATTTAGAAGAAGAACAATTGA
TTATAAAATCACTGCTTTGATGCAATTAATTTGATCATTTCTAAACAGGTGATGAATATTGTCTTATGTTATTTGCCCTCCA
TTACTTAATCTGACTATCATAGAAATAGCTAAGAAATCTTCTTAAGAAATGAGAGTTTGGCAACTACCACTCATAGGCCA
GTATCTGTAAACAAAATGCTAGTAATTTTGTTCATTAAATTTTAAACATTAAATCTATTATTGCAATTAAGACCTATTAA
AATGGACAATAAGTAAGGGCCAGATATATCATGAGTAGAAGGAGTCCCTTTCTACTGAGAGCCTATGGAAAGGACAACCT
AGATTCCAGAAAAATCTGTTCAACTTCCAGGATGGCATACTAGGAGAAATAAATTTGGGGGTCTAAAGAGTAATAAGCAG
GAAAAAATCTGGTTTTCTTTGAGGCAATGATTAGTTGAAGCCTACACAAATAAACCAATTACAACTTTTGAAGTGAAC
TGAGAATAATTACACTGGTAGTCAACTCCTGGGGAAAAAATTATGAAGTTTCAAGGCTGTAAGCTGTCTAGGCTTTTATTAA
CTTGCAATTGTTCTTAACTGATTACAGGCAAAAAGGTCAAACATTTTGGCCTACCTAGGTAGCCAGATGGTCTAGAGAT
AATTTCTTAATTACCAAATGACTGTGTTTTATAGTGTCCCTTAGGAAACCAAGTTTTTAAACTGTGTCTAAAGAGAACC
TGATTTAATTTTTTGGATGTTTCTTTATTTTTGCTTGATTATATATTAATCATTTTGTAAAAAATAATCCAAACACT
ACAGAAATATAACTTTGGATGTTTATAATCTTCGCTTCTCTCTTAGATAACTATTTCTAAGAGTTTTTGTATACATATTT
AGATTTTTGATACATGTAAATATATATAATCTTTTTTACTAAAAATGGTAATTTTACAACATGCTTTTAAACAAACTTTTT
TTTTTACCTAAATTTCTTAGCTATTTATGTCAGTACATGTTGCTCTATGAAGTTGTAAACAGAACAAAGCAGCGTGCT
CCCCAAGAGGACTCTTAGATATTTGAAAGTAGCCCATATGGTAAAGTAAATTCATTCTGACTTTTGCTTGAGGAAACT
AACATCCTCTCCATCCTGCCTTGAGGACAAGTGTGTTCCCTTCATGGCTGACACATATCTTGGCAGAGCACATGTGCTGC
AACAGCACACAGTATGGGGTAGGAACAGGATTTGAGTGATTTACTAATCAAGTGTTGGCTAGAAGAGAGGAGACTTGTA
CCACCCCGACCCCTGCATCATGCTCTTGTCTCTCTTCTTAGGGTGAATGTAAAGGGGAATCTGCCCAGTTGGGGTACAG
ATAAACCTTTTTGGTTACCAGACTGTTGGGGTTTAGATGTCAACTCTTTATAGGAATTGTCTAGGAAAGTCAGCTGTCCA
GGCTTGAGAGCCTTAAGGAAGCATGGAAGCTGCAGCTCCCTTTTTCCAGGAAAAGGCAGTCACCCGCTCTCTTGGAAG
CTGTATTTTCAAGGAGGCCTCTCCAGATGGGCTGGGGGACACTGCCAAGCTTTAGCATATTGTCCAGACGACCCAGCATG
AGCTATCTAGGTGATGTTTACAGACAGTACCACTCATGGTGTCTCTTGTCTTAAATCATGTTTCTGAGTAGCTTGAATA
GTAACAAATGTGATATCTTGACATCATCTGGTGGTTGGGTGACAACCTGTTTAAATTTTCTAACACAGTTGGTTTCTGCAA
TGCCTTTTCCCAAGTAATTTAGTATTGTCTTATCCTGCTATGTCTTCCACAAAGGGAAGATGATAAAATCTTTTAAAT
AGCATAATGTTTGTCTACTTTAATTTTACATTAATAATTTGTTATACTTTTATTAAAAATACTTTTACAGTAAAGTTTAA
ATCCATTTTCTATGGATTTTTTCAATTTTGTAAATTTTCTTCCATTTTATAATCATATAACATATACATTTAATAAAAG
TATATACAATATATATCAAGCATATATGGTATATATACTATAATTTTGTCTGTTTTTCTACTTTCTTTCTACTTATGTCT
ATTTTCTGTATTTTTTCCATATGGACATCATTTTTTACATTTAATGTCTTCTTAACATTACAGGGCAGTTCTAATTGTT
AGAAGGCCTCCTTATACTGATGGCTAGTTTGAAGTCAATTTATAAGTCAAGTTATGTTCTTGGTTTTATGTCTTAAACAGG
CATCCCTCCTCGAACCTTAGAGGAATTGATATCTGACTTCACATGCTCTAGGGGATGCCATGTAAAATTTTGTAGAAA
TGTTTAGTATTCTGGCATGTGTGTCTCTAACTTTGTGAGATGATTAGAGATCTGTGATTAGTTAAACAACCACACAGGAC

253/375

TGAATTAGCTTCCCTCCGCTAACTAAAAGAAATTGAACAGATTGAGTAAATTAAGTGGATGCCTCATTAGCTCCACAAAGT
TTATTAGAATTAGAGTCAAAATCTAATACAGGGCTTTGGACTACTAATATCTGCTAGCTACCTTTGGGATGATTTTCAGT
ATCATAGGATCATCTGACCAACAAGCTGTCTCAAATTCCTGTTAGAGTGAAACCTTGGCTGGACATTAGCTTCACCTG
GGTAATATTAAAACTACTGATACCTGGCCCCAGCCTGGAGAGATTTTGTATTCTATTAAATTTGCCAGAGTTAGGGTTCAAG
GCAAGGTACATCCAGAGTTTGACAACCACTGGATTTGAGGCCAAAAATGTATAGAAATGTGAAACAGGTAAGCACTGTTGGA
ACTACCGAGATAGAGACAAACACATTTCCAGGCACTAGCCTCTGCTTCTGTCTTTTCTGATGTAAGAATATTTTCGCCTCT
CAGAAAGTTGCTTTCCCAAATGAATACTTTAAAAAATTAACCTGGTTTFTTTCAGTACATAAGACAGGGTAAGGAGAAAA
GTTTCACCTGGTTTFTTAAAAACACTATTGTTTAAACTTTTAACAGAATTATCTTCTCAAAAATACTTAGAAATGGAGTAAAT
GTTTCTGCTTTTGATAACACTGAAACCAAAGCTAGAGAGTACAGTTAAAAAGGGCCATTAAAAACAGTTTTTTATTCTATAA
AAATAAATTAATCATCGAATATTCAATTATAAATTCATCATGAAGGAAAAATACACATTAAATTTATTATACTAAGATAA
ATATAAACCTCTATTGGCAAAACAACTTCGTAGTTAAATTTTCTAATTTACCCTTTCTGCATCTCATGCAAATTATGTC
TTCCTTGCAATTGCCAATAAATATGAGATTGGGGAAGGATGCTGCAATATCCATGAGAAAGTTTCATGTAAGTGCAGCA
ATCAGATTTCATTTGCAGATCCAGAGTAGTAACACTGACAGAACTATGTCAGTTAAGCTTTCTGCATTATTATTATTCGCT
TGTCATTTTTCTTTTGGCAGAGGAGAGATTGAGGATTTACCTGGTCCAGAAATCGTTGTAGGTTAAACAAGGTACCAATCT
GGGTTTGTTTTTATCCCCCTTGCTTAAACCAATCGTACAGTTAATTTCCCAAATGTGTTATTTTTTAAATGCAAAGCAGT
TCAACAACGATAGAAGGTGTAGGGATTCCAGCCACAGACAGAGCCTGAGAGAAACAAAACAAAGCAGATTGAGAAAGCAGG
CAAGTAGCGCTTACTTTGTTTCAGTGGTATGTCTCTGCAAGTTCAAAATCCTTCAGTATCTCTTAATTAATTCATAGAC
TATTTCCAGTGAGGTTTCACTGAGAATTCCTTAATGTCAAGAGCTCTCTCTGTATCTTAAGCAGTTAGTGTCAATTGAA
TTTACTTTATGCAATGATCTTTTACCACAAATATGTATTGAAGGCTTATGATGTGCAAGACATGTCCCAAGTTCTGGTAAT
ACAATGATGAACAAAATTAATAGTTTCTTTCTACACAGTTTGTGGTTTATCAAATTTATTACATGTTTAAATAAATGTTT
ATTAAGTGCATAAATAGTAAAGAAATCAAAGATGTGATTTTCAGCACTATGTATCAAAACCACAGAATGGCTGAGTGTTC
TTTTTAAATCCATGTATCATAGTGTATTAGAAGGCCAAAATAATAAGAAAAGCAGATCAGAAGTCAATATGGTCCAGTAAC
AAGAATAAGGAGTCAAGTTAGAGTCAATTAACGGTTTCACATTTTCTTAGCTGTGGGACTGTAGGTCGTTATTTTTCTTG
TCTTATTTTGTCTTTCTGTTTTCTTTCTTTCTTTTCTTTTTCTTTTTTTTTTAGACAGAGTTTCACTCTTGTTGCCAG
GCTGGAATGCAATGGCACAACTCAGCTCACTGCAAACTCCGTTTCTGGGTTCAAGCGATTTTCTGCTCAGCCTCC
CAAAGTAGCTGGGATTACAAGCGCCACCACCATGCCAGCCATTTTATTTTGTATTTTTTACTTGAGATGGGGTTTCA
CCATGTTGGCCAGCTGGTCTGTAGCTTCTGACCTCAGGTGATCCACCTGCCTCGGCTCCCAAAGTGCTGGGATTACA
GACGTGAATTCATAGTCTCAATTTGCACTATGCAAAATGTGAACAATGGTATTGTGTTCTATTTACCATTACCCAGTCA
CTTTTCAATGAACCTCTCTTAAGTATAGGGTTTCAGAGATATGGTAGGTTGGGTTTCAGATGACCAAAAATAAAGTGAATAT
TCCAATAAAGTGAGTCACACACATTTTGGTTTTCCAGTACATACAAAAGTTATGTTTACACTATAGTCTATTAAGTATT
CAATAGCATGTCTAGAAAGACAACGTGCATACCTTAATTTTAAAAATATTGCCTTGCTAAAAAGTGCTTATGATCATCTGA
GCCTTCAGCAAGTAGTAATCTTTTTGCTGGTGGGAAGTCTTGCTTGACGTTGATGGCTACTGATTGATCAGGGTGGCG
GTTGCTGAAGGTGAGAGAAGCTGTAGCAATTTCTTAAACCAGGCAACAATAAAGTTTACCACATTTATTGACTTTTCT
CTTCATAAAAGACTTCTCTGCAACATGTAATATACTGTTTGATAGGATTTTACCGAATGTAGAATTTTCAAATTTGGAG
ACAATCCTCTGAAACCACTGCTGCTGTATCAGCTAAGTTTATATAATATTTTAAATCTTTTATTGTCAATTTCAACAA
TTTTTATAGCATCTTTACCATTAGTAGATTTTCATCTTGAGAAACCACTTCTTTGCTCATCTATAAGAAGTAACTGCTC
ATCTCTTTGTTGCTGAGATTGCAGCAATTCAGTCACATCTTCAGGCTCCACTTCCAATGCTTGTTCTCTTGCTATTTCT
ACCATATCTGCAGTTAATTCCTTCACTTGAACCTTCAAAGTTATCCATGAGGGTTGGAATCAACTTTTCTCAAACCTC
TGGTAATGTTGATATTTTGACCTCCTCCCATGAATCATGAATGTTCTTAATGGCATCTAGAATGGTGACTCCTATCCAG
ATTTTTAAATTTCTTTATCCATATACATCAGAAGAATCACTGTAGAAAGTAGCCTTCCCAAATGTATTTCTTAAATAAT
AAGACTTGAATACTCTTTGAATCATGGCTGCAGAAAGAATGTTGTGTAAAGCATAAAAACAACATGAATCTTGTGTAT
TGTATTAGTCTGTTTTCATGCTGTGTGATAAAGAAATACCCGAGACTGGGAAGAAAAGAGGTTTAAATGGACTCAGCTCC
ACATAGCTTAGGAAGGACTCACAGTCAATGGCGEAGGGCAAGGAGGAGCAAGTCACATCTTACATGATTGGCAGCAAGCAA
AGAGAGAGCTTGTGCAGGGGAACTCCCATTTTTAAAGCCATCAGATCTTATGAGACTCATTTACTATCAGGAGAATAGC
ACAGGAAAAGAGCTGCCCCCATAAATGAATCACCTCCCACTGGGTTTCCCCACGACACATGGGAATTTGTTGGAGTTATA
ATTCAGGATGAGATTTGGATGGGGACACAGCCAAACCATATCATTTCCACCCCTGGTACCTCCCAAATCTCATATCCTCA
CATTTCAAACCAATCATGCCTCCCAACAGTCTCCCAAAGTCTTAACTCATTTCAGCATTATCTCAAAGTCCACAGT
CCTACATCTCATCTGAGACAAGGGGAGTCCCTTCTACCTATGAGCCTGTAAATCAAAGTAAGTTAGTTACTTCTCTAG
ATACAAATGGGGGTACAGGCATTGGGTAAATACCATTCCAAATGGAAGAAATTGGCCAAAACAAGGGGCCATAGGCCCC
ATGCAAGTCCAAAATCCAGCAGGGCAGTCAAATCTTAAAGCTCCAAATGATCTCCTTTAACTCCATGTCTCACATTTG
GGTCATGTTAACGCAAAGGGTGGGTTCCCATGGTCTTGGGCGGCTCCACCCCTGTGGCTCTGCAGGGTGCAGCCTCCTT
CCTGGCTGTTTTTACAGGCTGGTGTGTTGAGTGTCTGCTGCTTTTCCACACATGGCGCAAACGTGTCAGTGGACCTACCATT
CTGGCATCTGGAGGATGGTAGCCCTCTTCTAACAGCTCCACTAGACAGTGCCTTAGTAGGGACTCTGTGTGGGGGCTCC
AACCCACATTTCCCTTCCACAGTGCCATAGCAGAGGTTCTCCATGAGGGGCCCTGCCACTGCAGCAAACCTTTTGCTGGA
GCATCCTGGCATTTCCATACATCCTATGAAATCTAGGCAGAGGTTCCCAAACCTCAATTTTGACTTCTGTGCACCTGC
AGGCTCAACACCACATGGAAGTTGCCAAGCTTGGGGTTTGACCCCTCTGAATCCATGGCCTGAGCTGTACCTTGGCCAC
TTTTAGTCACAGCTGAAGTGGCTGGGACACAGGGCACCAAGTCCCTAGCCTGTACACAGCATGGTGACCCTGGGCCCTGA
CCCATGAAACCAATTTTTTCTCTTAGCCCTCAGGCTGTGATGAGAGGGGTGCCATGAAGCACTCAGACATGCTCT
GGAGACATTTTTCTCGTTGTCTTGGGGTTAAACAATTGGTTCCCGTTACTTGTGTCAGATTTCTGCAGCTGGCTTGAAT
TGCTCCACAGAAAATGGGATTTTTCTTTTCTATCGCATTTGTGAGGCTGCAAAATTTTCAAACCTTTTGTGCTCTGCTTCCCT

Fig. 6.248

[illegible]

255/375

TCATAGGTCAGAGAAAGACTGTGGTGCTACAAAAACATTAGCCAATATATTATTTGCTTTACGCTAAGTGAATGTGT
GTAACATGCTATCTCTTTGAAATTTTTTGCCTTAAAAATGCTAATCAGTTGGCACAAGGCGATCATTTACATAGTCAGA
ATAGAGCTTTTGGTTTAGCATTTTATCTTAAATAAGGCAGAAATGGCATTGCTCTGGATGTGAGTATGGTGCATTATA
ACCCAAGTGGTGGAAAAATAACTGCTAAATGGCAAACACATAGAACTGAATTCTGCTAGTCAGCTTCCATTTGGTAGA
GATATGTGTGCCCTTGGGTAGCTGCAATGTTAGCTATTATTAATAGTTCAAATCTTTGCTTCATAAAAGTTCTGCATAT
AGTGTGTGACAAAATTGAAGTGATTCAAGGAAATCATAGTTCTGTGGAGCTTCCTCCCTGTTTTGTAGTGGAGATTGGGA
ATGGGGGTGGACCATAAAGTAGGTGGTTTTTTTTTCTGCCACTCTTAACATAATTACACACCCTGCCATATCCCCAC
CAACATAAGACTTCAGACTGAGAAAACCTACATAATTTAACCAATGTTAGAATATAGGCATTTTTTAACGTGCTGAAAAC
AGTGTGTCTTTTTGGTTCCATAAATAAATCATTGATACATTTCTCTGTCTATGAAGGAAGCCATGAATGCTATGA
GTAAAGATATTTGTGGCAGGTAAGAAGAGGGAGTTAAGTAAGGGAGTTTAAATATGAAAAATTCATATAAAGGCTCCAAG
GTTAAATAAGGAATACTTTTGCACAATGGGTTCAGGTTTTTACTGGGTAGAGCATTTTTTAAAGTTTTATAACGACGTTA
GAAGGAATCGATTGGGAGAAAACTATATCTGCTTAATGTGAGGGAGCACTGTGGAAAATTTCCAGCACAACTTTTC
CTGGGCCTCAACATTTCTTGGTAATGAACCTAGATTTGGAGTGATCAAATAATTTGCTGTCTCAAGTAGTAAAGGGGG
ACTATTACTAATTCACAAGAAGACAGGCATAAACCCAGCAACATGTACAAAGCAGGATGATCTCAGGTAACCTCAGGAA
GATGCTGGAACACTCTGGGTGAAGGGCATTAAATGCTGTTTACAGTGGAAACACAGGACTGCTAATGGTATTTTTATGCTT
TTATGCATCAAAAAGCATTTGTTCTTTGATTTTGTAACTCTCTCACATGTGAAGCAGGGCCTTTCAATCTGGATTGGGGT
CAGAAGACAACATGTGGATGGGAGGCAGAAAATTATAACAGACTCACCTGGGGAGCAGTTTTTTTGTGTTGTTGATATT
CCCTAGCTGCTGGGAATGGTGGCTCACTCCTGTAATCCAGTGCTTTGGGAGGCCAAGGCGGGAGGATCACTTGAGCCC
AGAAGTTCAAGACTAGCCTAGGCAACTTAGCAAGACCCCATCTCTACAAAATTTAAAAAATATTAGCTGGGCATGGTG
GCATACACCTGTAGTATCAGCTACTCAGGAGGCTGAAATGGGAGGATCGTGTGAGTCCGTAAGTCAAGGTTGCAGCGAT
TGTGCCACTGCACTCTAGCCTGGATGTCTTCCACCTCCCCCGCCAAAAGGGATATTCCAAAACCTACAACATTTCTACT
ACATTATTCTACATTTCTTCTTTTACTCTCCATATTGATACAGAAACAAAACAAAACACATTTGAGACTTACCCTGCT
AAAAGAGTGTCTTTGAATTTGTGGCTGCAATTATTTCTGTTGCAACTTTAGTGATATTATTGTTATAATGATACTTGAA
GTAATACCCAGATGTATTGAAAAATTCAAAAGACTTCATTGCCAGCTCAACCTGCACTCTCAAGCACTGCTTACTAAGGG
AGTAACAATGGGAAGAGACAGGTGTGAGAACAGACCCAGAGCCAGGGAAATGAACATGGAGAAGGGAAATAGGCAAAA
TCTCCTCATCAGTGTGGTTGAGGGAAATATTGGGGCATGGCATGGAGAGTCCCACCTCACTTGGCAGCCAGAGAATCTTA
AAGCTTATTGTCAAAAACCTTATGAAAGGTTAGAGAAGGTACCATTTTATTTTACAAAATACCTTTAGCCTTTACCAGCT
CAACATCCGTGTGTGAGCCTGCTTTGAATAAAGAAATACACGCTCTTCTTAAAAATCTGCCCTGACTACGATGAGCTTCT
TTGTTTCAGCTTATTTTGACTAATTAGGCTGAGGTTACAAACCACCTGATATTTAGTTGCTACAGCCACAGTCTTAT
TTCTTGCTCTCATTACTTGTCTTGGCTGGATGATATTGATATGTTGTTTTGTTCTGGAACCAACCCTAAATGAGCTG
CCCACCTGAGAAGGCAGAGAAGAAATGGGAGATGGCAGGGGCACACAGTGATTTTTTAAACTTCTGTTTGAAGATGCC
ACAGATCTCTTCCATGCACATGCCATTGGCCAAAGTGGTTGCAAGATCAGCTTGGTGTGAGTGGGGCAGGAAGTATAA
TCCTGGCACAATAATGGGCTTGGAAAGCTGTTTAAACATTTTACAATAACACAATCAGATTCTTTCAAATTAATTACAA
AAGTACTTAAAGTTTTTTACATACATTTCTGTGCACTGTCCCAAAGCTATATCTAATGTTACTTCTCATTCGATGAAT
TACTATTCTTTTCTTCTTAGCTGTGTTTAAAGCCCCATACATCTATCTGTGATAAATTTGTACACTGTATTGCTGTG
GTTTACTTGTCTCTCTCCTTCCCTCAGTGGTGGGCCCTTGGAGGGCAGGAGCAATGTGATATTTCATCCATGAGACCCAA
GTGTGTGATTGGTGCACAATGGACACCCTAAAAAGTGTATTATTGATAATTAATGAATTAATAGCTAAATGAGGGAGTGT
TTTCTTTACCTTCCCTACACTCACCTTTTCTCCATTCCAGCAAGCAATCTTGACATGGAGTAGAAATCACAGTGGAAAT
CTTGAAGAATAACTAGAAGTTTACCAGATGAGAAAGTACAGGGAGGTAAATCAGGGAAGAACAGCTGATAGATTGAGTT
GTAGCCATGTTGAGTGAAGGTAAGATTCTTGGATTTTGTCTCATGAAGTCTGAAAGTCTACATAACATCAATCTGGCCA
CTGCCAAGTCTGACCCATCTCACAGCACCAGAGGATTGGGGTAGTAACTGCAGATGTAGCACCACAGGCTGACCAGT
CTGACCCTCATTAGGTTCCCCAAAAATCAAATCTCTAATGCACCTGCATGGATGCTGCAAGGAATGTGCACTAAAGGA
ATGTGAAAGCGATAACTATTTTTTATTATTTCTGATGAGACATTTTAGCAATTATGTTAAAAATCTGCACAACCAAAAAG
TCTAAACAGAGCGTGAACCTCTGACATTGACTCTGGAAATTACACACATTTTGTTTTACTATTTTAAAAACACACATGA
ACCGAAGAGAAAAGAGGCAGAAAGACTGGCTAGAACACAGCAGAACTTACCCATTAATGTAATGGAGTTTGGAGCTTTTC
TCAATGATGCCTGTGGGGAGCTCCGTACTAGTAATATCTCAAGGATATTGCCATTGTTCAAACATTTTCAAGGATTCCCC
TCTTGAACCTTACCTTCAAAGAGCCTTTGCTACATGTTTTTGAATTCATTGATGACAAATCTCCATCTGTTGAAGGTT
TATCTAGTTCTATGAAGCTGCCAAAAGTCTTTTGGCATTAAAGCCTGATGATTAAAGTTGATGATCCAGTTAGCGAATGC
TATTTTGGAGTCAAAATGAGAAGTAACATAAAATTAAGAGGCAGTTTTCTTATGCACACTGGAAGTGCCTGTAAATGAT
AATTTCCCAAAGAGAATGTCAAAAATGTCTTTAATCCTAATAGAATCACTATATTTTTTTTATTGAAATAAATATTTAG
GAAACATTGGTTTTGAATTTGCATATGGTATACATGTTTGAAGAATCACTCTTGTACTATATAGGTAACACTTATAAGT
GTTAAATATCAAGTTACTTAAAGTACTTATAATGAATATAAATAAATGATCCATTGATATTGTCTATATTTTTTA
TACATAAAAGATTGTATATGTTATATAATATATGTGTATACATATAGCACAAATGACCAAATTAATTTGTCTTTGCAGCT
ATTTTTTAATTAACATTTTACATTTACGCTTTCTTAAACAATTGCCTCTGTTATATCAGAAGCCAAAACCTGGCAAATT
ATATTAGCTCAGTTATTTAGTTACTGGGGACTCTATCTTTAAACCAACCATGGGAATTCATTTATAGCTACTCAACACT
CAGGTATGTATGACCATGGGGCAGACAAAAGACTGCTTTAAAAATCACTGATGTGTATCATGCTTTTTTCTTCTTTTA
GTATTTCTAGCCATCAAAAAGAAATTATATTGTGAGGCAGATGGCAGTAATATATTTTTTCAAAGTGAATTATATCTGT
TTTCCCATATAGGTAGGTAAATAAATAAATAAATAAATTCTATATAAGCAACATGACATAATTCCCAGACTATGAATT
TCTGCTAATCTGAAGCATTTGATTAAGACTGGATTTAAACTATGCTTACAAGTTGCCGGAAGTACTCAAAAAGGCTAC
ATTCTGTTAACTGTGTTATTTTTGTCTGTATTATGTCAAATAATTTTGACTAAATCATTGGTATTATCAAGGTCATGTA

256/375

GAAGTCTTCTTAAATTCTGATTAAATAATCGACTTTCTTTACAACCTACAGACAAATTGCAACAGAATCTGTATTTTCAG
GCAGTTTCAGCCTGCATAGGGTCAATTTAATACCATATAAATGTTGGGAACAGAATTATCAGAAACTTCAGATATGTCAC
CATAAGCCAGATGAACAATATATGTCAGTACCATTGGGGGAGTATTTGCCAGCATAACTGGATATGTTTCTTGAATGC
ATGAAAAATGTGGTACTGAATGATTCTTCCTTCACTAAAATGACTTATTTATCTTGATTTAAATATAGGCATACATTG
GTAAATAAAACCTAGGTTTTTTCATAATATATTAGAGAATTTTGTATACATAACAAATGAGGTAATTCAGATCGATTG
GAATTCAGGTTTAGTGCTTCGTAAAGAGTTGAAAAATAGTTCTCTGGTAGGTAAGTAAATGTGGTGGGAAGGACAGGACA
TTCTCTAAAAGTGCTTGGTTTTAGAGATGTTTTGGTTAAGAGTTTGACCAGGTGGTAGCAGATTTACTTTTTCTCTAACT
CAGTTTTACTTGAAAGGCCTTCAGATTAAATACTTACAGAACCCAGGAGAAATGTATCTGAGTTACAGAACTTGAATGG
GGATTGTCAAACCTGGAGAATGCTTGCCCCATCTGAAGGAGATAGCTGGCAATATGTAGGGAGGGGAACCTTAGGTATTT
TTGTTTGTGTTGTTTGTGTTTTGAGGCGGACTCTCGCTGTCACCCAGGCTGGAGTGCAGTGGGGCGATCTCGGCTCA
CTGCAAGCTCCGCCTCCAGGTTTCATGCCATTCTCTGCTCAGCCTCCGGAGTAGCTGGGACTACAGGCACCTGACAT
CACGCCCGGCTAATTTTTTGTGTTTTTAGTAGAGACGGGGTTTCAACGTGTTAGCCAGGATGGTCTCGTTCTCTGACC
TCGTGATCCGCCCGCCTCGGCCTCCCAAAGTGCTGAGATTACAGGCGTGAGCCACCGCGCCCGACTGGGAACCTGAAGGT
TTTAAACCTCCTAAACATTCAAAGAAGCCCAAATCTCAACTTTAATGTGACATTTTCTGTGTGCTTTAAATGTTGGAT
CAAAGGAAAAACAAAATTAATAATATGTTGGACAACTCAGGCCTGCTGTCCATATTTGATCCAAGGAGGACCAATTT
ACCCACTCTATCCTACACCTTTCAGGTCATAGCATTTCCTTGTATCTTTCGGCATTAAATGTCATATTTCCAATTTTT
CCATATCTATGAGCAAGGCCCAAGGCTGTGAGCCAAAGCCAGGGTTGTCATGTGATATCTTTAGAAAAACCCAGAGAA
GCTTTCTCTGTTTTCTCACTATGCTGTAAGTATGAATAGCCCCAAAGCAAAAAGACAAGTACCTGACTATCATGATC
TTCTAAGTATTCATGGAGCTCGCTAAAATATAGTTCCCTGTGAAGAGCGTGTCTGTCAGAAAAAGCATTGGAGATGG
GCTTAGATACCTTCCTGTTTGATCTCAATAGTTTAAATGTTTACTAGCTCACTGAGAAGAGACTGCCACCTTAGTGTTAC
CCTCTGTACACCCCTAAACAAGTCATTTATTTCTCTGTTTTCTCTCTTTAAAAAAATTTCCATATGAAATTTCTGTGA
TTTTTTTTCCCTCATTACCTATTTTCTATCATCATTGTATCCAAAGGTCAAGAGAGAGAAAAAGGCCACTTCTCCATT
GACTGGTTATCTCTTAGACTGTATGACAGCAAAAATATAAGCAAGGGTTAAATTTCAAATGCATCCACTCTGCTCATAC
ACATTTGTGATTTAAAAACACACTTCATTGAATAATTTAAATATGGTTGTACCATCTGTTCTTGTGGGGATTAACAT
TGTTTCATGATGGCAAAATAATCACGTTAAATAAATTTAGATACTGCACTCTTATTATTAATAATAGCAATGATATTGT
TAGTTTCAGATGACCCGGCCTTTTCTGTCTCCATATAATCACACTATTGATTTTCCAGTATTGGAAAGGAGAACGAGAGA
GTACATGCTTTTATTTCTAAATGGAACATGCTGTTTCAGGAATTCTGCCATTTCTTTTATGGAAATAAAAAATAAAGTGC
AAACATATGCCATCTTTGAAGGTAACATTATGTAAGCCTTTGAGTATAACATTTGCTGTCTTTATCTATTTCTTTGTGT
CTATTCATAAGAAAAATGATCAGATTGTCAAATTCATATTCTAGAACTACGCAATCAATTTTTTTTTTCAGGCATTCTGT
CGTCTGCCCTGGAATGAGATTAGCAAAAGAGTCGTTGTGTAAACTGAATTAGTTTACTTCATGCGAGCATTGATTTTACA
TTCCCTGAACCTCTATAACATTTTATGTTTGAGCCACACAGTAGGTACTATCTCACATTGACTGAGAATTTATTGTGTT
TAAGTCATTTCTTCTAAAAAGTATTGTAAGCTTTGTGAGGACAGGGGCCATTTTATTTTTCTCTGTATCTGTTGAAAT
TTCCCACTCTGCTGGGTTTTTCTAAGGTCAAAATAAATAGAAATTAAGTGATTGACTTTTTAATGTTGTATAGTGGTGG
GAAAAGGTTAAAAAGAGTTGCTTTTTCTAGCAAGATGGTATGGGCCAATGACTTCTACCAACACCTAATTCGGTGATAT
AAATGATATACTCTTAGCTTGGGCTTTTTCTCTGTGAACCTCTGATGGCAATTGGGTGTGGCAAAATGGGTCTCTGAAGA
TATTTTGAAATTTCCCCAACAAGAACCAGTGCTTAATGACCTCTACTGCCAGGTAACTTCTGAGTTGCTGCACC
TATTCCTCTGCTTTTCTTTAAATCACATACTTTTATATTTCTTAAGAGAAGGTAGAATGTAATAGGCATCATTAAAT
TTTGCAGAAAGTCTCCAAACATGTTGTTAAATCACCGCTGTCTTCTTACCTCCAGGCAAAAAGGTACCAACTTATTTA
AATATTTGTTCACTCACATTATGTGCTCCTGTGAATTTTCTCTGGGTGTCACTCTTCACAGTGAGTATGAGCTCTCATT
TAATCTCTTTCAAGGGAAAATGAGCTCAAAGACCTGATGTTGCAACTTGACCTCCTTGAGTTTGTATTAAGCTGTAA
CTTGCTGATTTGTCCCTAGTTTATCTATTATGAAAACCTGGATGTTGTCAAACCACATTTTCATTCCCAGTCTGTGTT
CACTATTTGATGTTCCCAAGTTACACTGCCTTGGTCTCACTAAATTTGGTTTTCTATATTACAAAGTCAATTTAAT
ATCTGAATGATCTTCCAAGATACTGCCTATAATTTCTTTTACTTCTCTCACAAAGCCTTATCTTTTATTAAATAAAA
ATGGTCCCAAGCCCATTTGTTATCATTTGCATTTCCCACTTTACACAAAACCTAGCCATAATCTCACTATCACTTGTCTG
GTAACCTCAGGAATATGCTGTATAAATAGTGTATTTTTTATTTTGGTAAAATATTGCAAAAGTATCTTGTGGTAGCTAT
AATGGATGTGTGAATTTGGATAAAAAATACATTAAGTGTGTTTTTCTTAGTTGAACAACATAGATAAAGAATACTGAGT
AAAGACTAAATATTTGCCCTGGATGGAAGACCGTTTCATCCAATCAAACAAATATACAGAAACATAAAGAGATAGTAAATA
CACTGGAATGCAAAGTCAGAGTCAATAGTTATTTAAGCTTGCTAATAAAAAATGACTGCAATTTCAAGTGCACAGTTAAT
TAGAATTTGGATGGTAGAGGCCCAAGGTGATGGCATGTAAATGAAGAATATGTGAGGAATTTCTGTCTTAAGCCTTATTC
ATAGATGTACAGCAGAGAAATTAAGCTGACTGACATTTCTGTGCCCTGCAATCGTCATATCACACCTGGGGTGTGGGATT
CATTTTCAGATACCACAGGTTAAGAGGAAATCAACAAGGAGCAATCAGTCCAGAAGGGTGTGGCAGGATGGTGAAGCAT
CTGGGAATCATGATGCTCTCGGAACCTGCCAAAAGAACCAGACTGATGTGGCCTGGAAAAGGGAGAGAATAAAAACTCC
TGTTTAGATAAATCTGAGGTTTTTCAATTTAAAGATTTTCAAGGGCAGGTGCAAGTGGCTCACGCCTGTAATCGCAGCACTT
TGGGAGGCCAAGGCAGGTGATCGCTGGAGTCCAGGAGTTTCAAGGACAGCCTGGGCAACATGGTGAATCACTGTCTCTC
CTAAAAATTTTTAAAAAATTAGCTTGTGCACTGGCCCATACCTGTAATTCAGCTACTCAGGAGGCTGAGCTGGGAGGA
TTGCTGGAGCCCAGGCTGTGGAGGCTGCAATGAGCCGAGATCACACTACTGCACTTCTGCCCTGGGTGACAGATGGAGAC
CCTGCTTCTAAATAAATAAATAAGACTCAGGCTTGTTTTTGAATGACTATGATCAAAGAATAGCACTTTTGAAGAGGTG
AAATTTAGTTTGATACAAAGAACTTTTCAATATTTAAATCTTCAAACCTTTTCAATATTTAAATTTTCGATATTTAAATC
TGCTCAAAGATAAGCATTAAATCTGCTCAAAGATAAGCATACCATGAAGCAGGGCTCCTCATGCCAGAACAGATATT
TGTTTTTCTTCAAGGCTGTTTCATGCAATTAGGGGAAGACTGAATTTCCCATGGCTTCTAATGAACCTTTTAACTATGAG

257/375

GATCTGTTACATGAAAAATTTTTCATCAAGATGGAGTTTCGCATTTGTTGCCCAGGCTGGAGTGCAGTGGTGCAACCT
CGGCTCACCACAACCTCCGCCTCCAGGTTCAAGCAATTCCTCGCCTCAGCCTCCTGAATAGCTGGCATTAGAGGCAT
ACACCACTATGCACAGCTAATTTTGTATTTTCAGTAGAGATGGGGTTTCCCCATGTTGGTCAGGATGGTCTTGAACCTC
CAACCTCAGATGATCTGCCCCCTCAGCCTCCCCAAGTGTGGGATTATAGGTGTGAGCCACCGCAGCAGTGTACAT
GAAAAATCTTAGAATAGTGTCTGATGGCACCAGTAAATGTTCAATAGATATTAGTTGTAATTGTTATCAGTAGTGAC
TATCTATGCAATTTGTAAGTGAATTTTGGATGGGAATAAGTAAAGGTGTTTAAATGTTAGCACCGGTTTCTGTT
GCTAAATAATTAAAGGTAGTTAGTAAGGTCTTAGGCTACTTGTAACTAATTTACTCTTAATTTGTCACCACCTTTATGTTT
TCCATTTATGCTTTTACATTTCTATGTTACCTAGATTTGGGATTAATTCATCAAATTTAATATGAAAACTTTAAGTGA
GCTAAATCACAATTGCATATATTAAATTTATCTAGTGATAACGTAGCAATAGTCTATCAAGAAAGGAATGAATCATGACC
GAAAAAATGAATCTCTTTTCATTAATTAAAGAGAGATGTTTCAGTTTAGAACTTACAGAATCTTAATGGTTAAGCTCTAG
GTGACGTTAGCTTCATTTGGATTATTTTCTCAGGTGACAGATTGCTACATCTTAGGATGGCAGCTAATATCTATTGAAG
GTATTCATTCATTCACCTCACTTCCCTAATTTATTTAACAAGCAGTGTACCAACCCTGCCATGCCTGCACCTAGCTGCT
TACCTCTACAGAGTGTCTTACCTTTTATCCCTTTTGTAGTCAGTCATCACAGGAAGACCAGCCTCTCAGTCATCCT
ATGTCCCTATATCCCAACCCCAAGGGCTCCATGGCAGCAAAGCAGTCCCTCTTCTCACCCTATCCCTGAACCTCCTTGG
GCTCCTTCCCTGCTGTATTTTCTCTGTATCAGTTATCATTTCTCTTATATATTTTACTTACTATGTCCATTTACCTAT
CTCTACTGGAATGTCAGCTCCATAAAGGCAGGAATATTTGCATGTGTTCTATTTGCTACTGGGTACCCAGAGCCTAGAA
TAGTAACTTGATAAATAATTTGTTGAATGAGTGAATAAGGCCAAGTGTGATGGAACCTGATACCAGAAAGGTGTTATTT
CTTCCCCAGGTTTACCGAAGCCATTTATGGCAGCGCAGCATTGTGACCCAAAGTCACTTGGCTCTGAAACCAACATCCC
CATCTTTTTTTTTTTTTTTTTTTTTTTTGGACAGAGTCTTGCTCTGTACCCAGGTGGAGTGCAGTGGCACGATCTTCACTC
ACTGCAACCTCTGGCTCCAGGGTTCAAGCAATTCCTCGCCTCAGCCTCCGAGGTAGCTGGGATTACAGGTGTGTGCC
ACCATGCACAGCTAATTTTTGTATTTTGGTAGAGACGAGGTTTACCATGGTGGTCAAGCTGGTCTCGAATTCCTGAC
CTCAAGTAATCCACCACGTCGGCTTCCCAAAGTGTGGGATTACAGATGTGAGCCACTGCACCAGCCCCAACATATT
CATCTTTGATCTCTCCCTGCAAGCAAATAAATTTGAAATTATGCTGAATAAACTCAGGGATCTAGAGATTTGACAAT
GACAATGATATTTCACTGCTGTATGGATTAAATACAAGGAGACAACCTTTTGTATCATTTTACATTTAGGAGAACATTC
GGTCAATATTTGCTCTCAATTTATCTCCATGTGGATCACTTTTGTCTTTTCTAGATGTATTCAATCTGATTTAGT
TTATTATGAGTTTCTCTATTATTTGTTTTTTTTTCTTGGATCATTGATGCAGACCTTAGAAGAGGTGGAGTACAGAAA
TAGATTTGGAGAAGCAATAATGAGTAAGCCTCAGTCTTTGCTCTGAGATGCATTCAGAAGTGGTTGAGGCAACATTGT
AAGTGTGCAGTTCCAGAGCCAGAAGATAACCAGATAATTTATAATCCAAGCAATAATATTGCAAAAGTAAAAGGAGGCA
CTATTTAATCATCATTCAGGGCAATAGCTGTATACTATTAGACAACTGAAGAGTAAAGTCCCCTAGTTTAAAAACT
CGACAAACGTAAAATATGCTTGCACATCTTTTGTAGTAATAAATATTTACCTTGCATCTACTATTTTTCAGAGACACATAC
TAGGCACGTAGCAATATATATAGAACAGTGTACAGGGCAGTGTGGTGAATTTAAAGACAAGTCATATATCTTCTATC
TTGTGGTTTCAAGATTCATTTTAGGACAGAGAACATTAAAAATACAATAAAAAGCAGTAAATGATGGTGAAGCTGAATT
AAGCTTGATGTGATGTTAGCCAGCCACAAGGTTTCCAACAGAATTACTGATATGATTTGGCTGTGTACCCACCCATATC
TCATCTTGAATCCTAGTTCCCATTTGAATTATAGTTTCAATTTCTATAATTCCTATAGTTCCAATTTTATAGTTTCAGCCAAC
AATCCCCATGTGTTGTGGGAGGGACCCGGTGGGAGGTAACCTGAATCATAGGAGCAGTTTCCCCCATGCAGCTGTCTGTA
TAGTGAGTTTCTCATGAGATCTGCTGGTTTTATAAGCTTCTAGTGTTCCTTGGCTGCTGGCACTCATTTCTCTCTCTGCCA
CCCTGTGAAGAGGTGCCCTTCTGCCATGATTGTAAGTTTCTGAGGCTTCCCAGCCATGCAAACTGTGAGTCAATTAA
ACCTCTTTTCTTTATAAATTACCCAGTCTCAGGCATTTCTTCATAGCAGCATGAGAACAGACTAATACGCTGATGTGT
ACCATTTTATTTCTATCTCATAATATTGTCAATTGAAATCAGTCTGTCTTGTATGCATGAATTGCACATCAAATGAAT
TGTATGCTTTTTTTTTTCTTCCATAGATAGGAGTTATGCCATCTACTCTTGTGTGTATACATAGATCATGCTCAATTAATG
CTGGCTGGCTGGTTGGGGTAGAAAAATGAATTGATAGATTAAAAAAGTCACTGTGGCAACCAATATAGAGCCTTGT
GCCAAGAGACCCCTCTCTTGTGCTGAACCTAGCTAGTTGACAGAGTAAGAACCTGCAGCATGATTATTTTTTATCTTACAA
CTTTATAATGATACATTTGGTTATTTGGAAATAAGTTTAAAGTGTTTTAAATCTTTCCACTGGTTCTTACTGTTGGAAA
TTCTTTTGCAGCTGAATATTGGCAACCGTTTGTATCTTGGCAAGTAGACTATGCTTTTTTAAGGATGAAAGTGTGGGAAG
TAGTATAGGACATCTGTGCAAGAAGTCATGTTGTCAAAGCCTGTTGTGTATATTAAACTCATTTGTTTCCATTTCTATA
CATTTCAAAGCAAAATGCCACTCCATTTAACATTTCAAACAGCTTATAAAGAGCTTGGAAATATGAATTGTGTGGGCCTA
CCTGAAATTTCAATGAATGAGCATCATTTTATTCAGTTGGTTTTTGTGCTGCTTTAGCTCAGCCTAAACTTTGGATATA
TAATAGGTTTGTGAGATAAGATTACAGTAGCTAAGGGCTTTTGTGGATGGGAGAATTGAAACCAGCATAATTTCCG
GTACCTGTTAAATGGCAGTTGGACCAGGCCTAATTTACTGTCTTGTATTTAACAAAGCAGAACAAACAAACTTACTT
AGATACCTGATTCACTAACTTCCCTCTTCTAAGGTATCCGTCCATGTGGTTTTCTCTTTTACTTAAAGTAGGTTTAAATAA
CTTGCCTTTATGTGACCAACGGGTTTCTGTTGGGTTTTGGAGGCAATGACAGTTAATAGTAAATAATATTTTGAGAGA
AACCCTCTCAAAGAGGCTCCATTAGCTGGAGAATAAAGCATTTTTTAAAAAGATGAGACCTTATGCTTCATTCATCTCA
AACTTACCTGCTTATAAAAAACAAAACAGTTGATTGATTGATCAAAAGTTATCCTTGTATATAAATTAAGTGGGCCCTGC
TGACTAGCTGATTTATGGGATTTTATGTTCTTTAACTTCGAAGAAGACATACAAATTCAGTCTCAACAGTTTTTACAATC
TGAGAGATTAGGTCAATGCTAATAAATTTCTGAGAACTACTTATCCATCTGAATGTTAACATCTTTTACTAGAATAGT
ATGTTTGTTCAGTTGATGAAGACTTTTGTGGATGTAAGCTTTCAACTCATTTAGATAAATACCAAGGAAGTTTTTC
AATATCATTTATTTAATGGATTATGATATTACATTTGATTGGCTATTCCTTATTTTAAAGTAGTTGGGCATTAAAGATA
TTTACATCTTTTATTTATTTTGTAAAGACTGTGATGACCTTCATGATAGTTAAATCTTCATTTGCACTGTTATTTCT
TCTGACTGTAGCCATTTGTGTGTAAGACTGCAAGTGTAATATATGCAGTGTTTAAGAGTAGATTAAACAAGAAAAGCTAA
TGTATGAACATAAGTAGCTGACCTTAATAGAAGAGTGTTTAAATTAATTTTGAATTTGCCAGTACACTCTCAAAACACA

258/375

GAGCTTGATTAAATAATGGCATTATACTGAGCTTATTCAAGTATTTGGATAACTTTTCTTTACTGAACTGAACTGATA
 GCCCAGGCAGGCACATCTCCAACACCTCTAATTAAAATCCACATTCATCCCTTGCTTCCTGAGAAAAGATGTTGCTCTC
 ATGTTCTTTTGGGCACCTCTTTGCAAAGTATTTCTGTTTGATTGCATATGATGAATAGCTCCACTACTTCCAATGTATTT
 CAGTTGTCAAATATTTATAATTATTATTCTTGGGAAAGTAACTGAGAAGGGAGTTTCAAGAAAGACTTGGACAGTTCCTTT
 GGAGCATCAGGACCTTACAATTTTCACTATCTTGTTCATAAAGCAAATGTTGTTTTAGGTTTCTGGATTACAAGGTCAA
 AGAAGGCAGAATTCTTGCCCTCAAGAAAAGTCATGGGGAAGAGTTGTAAATGCATGAACAGCTATGAAACAGTGTGGTA
 AAGTCATGTGAGTTGGCAAATAGATGAGAGGCTTCTAAGTAAACTGAGGAATGAAGAATGTTTTTGGAAAGAGATTA
 CGCTTAAAAGGAATTAGCCAGCCAGAGAAGAAAGAGAAAAATGTTCTTGCCAGAGTACCTATCATTGGGAAGCCCCAG
 TGGGCCAGAAGAACAGACTGTGTACAGGAAGACACTACCAAGTGTTATTTGTGGCTGATACAGGAGAGGAAGGGAGAG
 CAAAACAATAGAGCATCTCTGTGCTGAGTATTGGAATTTAAATTTTGAACCTTCACTACTAAATAATGTGGAACATTTGG
 ATAATTTCAAGCAAAGGACTCACATGTTTCTGTCCTTGATGAGTTTGGCTAAGATTTCCATTTTAAAGATAATCTTGGTA
 GGTAAGTGAAGGATAGATTTGAGGAGGAAAAATGGAATATTAACTCTAGGCAAAACATAGGGGGAAAGATAATTGAG
 AGAGATTAAAGAATGTGTAGAGAGGTAGAAGATATAGTCTGGTCTCTGGAATCAGATGAATTGGTTCTTAACCTCTGACT
 CCACCCTTAACACTCTATGTGACCTTGGGTATATATCTTATCCCTCAGTGTCTTGTTTTTCTCATCTGAAAAATGAGT
 ATAATAATAGGGCCCCAACTCATATTTTATGAGAATTAGTCAACCTGCCAACACAGTGCCTAGCACATTGAATGCATCT
 GATCAGTGTTAGCTATTATCTATTGACTATTAAATATTATTGTTACTATCAATAGTATTTCATGTCTCTAGGGTTTTGTGAC
 CTGATTAGCAGTTATTGTCTGGTTATTGGCTGAATGGTGGCCAGTACTAGGGAATATAAGAAGAAATGTGGGGAGAGGG
 AGTGGAGGAGGGGAGGAACACAGTTGATTGTAATTACATTATAAATGCTCAAATGAACTAGCTATGGAACCTTACAAGTG
 GAATTTTCTCATGTGCAGCTGATGGTAACAGCAGAAAAATGTGAACCTCTGAATAAAGAGGTGGGAGTTTTTTCAGCACAT
 AAAGAATATTTAAAGCCAAATTCATTGGATGCATTGACAGTAGGTGTAGAGATCAAAATCAAGAACAACCTCCAAGAATT
 GAGAGCAGATGCAAAACCCCAATTTTTGTGGGTCTCCAGTCCAGGTATGAGCAGAAAAACAGAGGGTTGGGGAGGGAAGG
 AGTCTTCCAAGCCATAAGCCAGGGGAAATCGTTTCAGTCAATTTCTATGCTCTGATGTGGTCTAATAACAGATGATAACCT
 CATCTTAAAGATGAGACTTCTTTAGGAACATCCTAAAGATGAGACTTCTTTAGGAACATCCTAAAGATGAGACTTCTTT
 AGGAACATCCTAAAGATGAGACTTCTTTAGGAACATCCTAAAGATGAGACTTCTTTAGGAACATCCTAAAGATGAGACT
 TCTTTAGGAACATCCTAAAGATGAGACTTCTTTAGGAACATCCTAAAGATGAGACTTCTTTAGGAACATCCTAAAGATG
 AGACTTCTTTAGGAACATCCTAAAGATGAGACTTCTTTAGGAACATCCTAAAGATGAGACTTCTTTAGGAACATCCTAA
 AGAAGTTCCTCCAGCATTTAAATTTGCTAAACGTAGGCCAGGGTAGAGTTAAAGGCTGAAAGAACCTTAATTAATATGT
 ATTATTCAGTTATTAGAAGAAAAGTCCATGAGATTGAAATTTGCTGCTTGGTCAATTACTTTTAAATGCTGTGCAGG
 GCATTATTAACGTTGCAACGTCTAGCATAGTGATGAAAATTTGATGTTCCAGATGCTTTTCATGTGAGTTCTCTTTTCTT
 TTAATGTTCTCAAGAGCATAGAATCATGGGGATGATAAGTGAGATTTTTGCTAGACTCTATACCTGTCTTCCATAGAAA
 TCCAGATATGCAAAAACAAACAAAACATAGATGGGTAATCATGGCCATTCTTAATAAGATTTGAGCCTTATTTGGAGG
 TAGGCCTGGTATGGATGGTAGCTCTAATCTTTAGATGAAATTTAACTCTCCAATGTGTTCTTATTTTCTTAAAGATCAA
 GTCCCCAACTACCTCTCTCCAGCCCCAGAGAAAGGGAATTGTTGACGATAGAAAGATTCCATTTTCTTCCCTTAAGGGC
 CACCTCCTGCTAGTTGGCCAGAGTTCTCACAGACTCTGAATTTCTTGGCAGGCTGGAGTTTAAACAGTAATCCTCTCTCAT
 CCAAATTTAAGTACAGGTAATCCCCAGGAGCCCCTGCCAGGCTTTTGGTAAATAATTACCTGGGTACAAGCAAAAATGC
 CCCTGCTAAGAAAACCTCTGGAATTTTACCCATCATAGGACACATAGGTCTCTACCATAGAGGTTTATATCTTATTCTTC
 AATTTCTGATTGTTAACCCCTCTAGGAAATTTCTTATGTGAAGCAAATCTTATTCTCTTCTACTGGGCAATCTCCTAAAT
 TAGCTGGCATGTGAAAATGCTTTCATTGAGCTTTTGTCTTTCAGACTCTCAAATGAAGGAGTATGTCCAAAGAGCCTCTT
 TATGCAAAATCTCAAAATTTACACCCAGTCATACATCAAAATAGTTGGCAGTCATTAGGCATTACATCCATATTTGTA
 AATTAGTGATGTTTCTCCAAATTTAGAAATATTATTTCCCAATTAAGAAAAATATACTGAAGAGTAAAAACATAACAGAA
 TTTTTGCTATATTTATTCTCTTCATAATTTATGCAAAATTAATAAAAAATTTATTTACTATTTTACTAATTTTGCATTGAGTGT
 TCTCTCATTCTGATGAGACTCCAGACTTCTGCCTTTTGTACACCTGTGCAAGCCTTTCTAAGCTGTTTTATTTATGTCC
 CAATATATATTTTCAAGTTTCAAGAAAGGCTGTTCTTACTTTTTGCGACACCTTAATAGTAGTTTTATTTTATCAAGGAACGT
 ATGCAATCACTGGATATTTCAAGAGCTGCCTACCTATTTTTCATACTATAAAGAAATAAACTTGAATAACAATGGATA
 GTCTTGGCAGGAGTGTGGAGGAGTTGACATCTTCCAACATGACTGTGGGAATATGAAGTGCATAGCCTATTAAAGGGA
 AAAATGTTTACAATTTGTAAGCTAGCAATCCATTTTTCAGAAATACAAGCACCAATCAGTAAGAATATATTAGCAATGT
 GTTTATTGTTTATATGAGTCCAAAATTTATATGTCCGTCAATAAAGGACTCATTGAATAAATAATGGTACATTTATGCCA
 TGGAATCTTATATAACTATTGAAAAGAACTCACTAGGTCTCTGTGCATTACAAAAATAATTTTTTTCATGATTGACTTA
 ATATTAATAAAGGATTATACATAGTATGAGCCCACTTTATTTCAAAAAGGAAGGAGAATCCCTATACATGTGTGAGGGTT
 TGTGTATTGTGTGTGGTATATTTATATTTGTATATAAATAAAAAAGTTTGCTGTCTTTTCCCTCCCAATTAATCCTACCAAGG
 AAGGGAAAAGACAGCAATCTTTTTTATCTTCACATTTCTGTGTCAATTTGGCATGTTAAAAAATAGCATGTATAATTTT
 GTAATTGAAACCTAAAATATAAGAAAAGAAAATTTATGAAATAGAAATGGTAAATACTATGCAGCCATAAAAAAGAAATGAG
 AGCGTGTCTTTTGCAGGGACATGGATGGAACCTGGAGGCTATTATCCTTAGCAAACTAACACAAGAACAGAAAACCAAAT
 GCCACATGATCTCACTTACAAGTGGGAGATAAATGATGAGAACTCATGAACACAAGGAAGGACACAGACCCCTGGGGTCT
 ACTTGAGGGTGAAGGTGGGAGGAGGGAGAGAAGCAGAAAAGGTAACCTATTGGGTACTGGGTTTAAATATCTGGATGATGA
 AATAATCTGTACAACAAACCCCATGGCACAAGTTTACCTATGTAAACAAACCTTCACATCTACCCCAACCTTAAATA
 CAAGATTTAAGAAAAAGGAAATTTACTCTTTTCAAACTTAAATTTTCTGGATTTTAAACAGTGTCTGTGTTTAAAC
 CCAACAGGTGTCTGAATTTGGCTACTGAAGAATAAAGTGAAGCTTTTTCAGCACACTGTATGTTTACCAGGTTCCCA
 GGATGCTTAAATAAACTGGCGTGTCTATTCAAACTCTGGATAAGAAATAAATTTTCAAAAATAAAAAATTTATCTCACAGAA
 TACTCTGAACACCTGCTACTCTCATTACCTGAACACTTGTGGTTTTGTGTGCTATAACTCTAGCAAAATGGCATAAAGGC

259/375

TAGAAAACTGTGGGATAAAGATACAGCAATTTCTCTAAGACCCCTGCTGCCTTCAGTAGAATTATTTAATATCCTTTCTA
ATTTCTCCAACCTTATTTTCACTGTTATGAAAAAACAGCTTACAAAGAATTAGTAACATTCACATCAATGATTCCATA
GATCTTCGTTCAAAGTGCAGGTAGAAGGTGCATTTTCTCAAAGAGTGTTTTAAACGAGGAAAAAAATGTGTATCATCAT
CAACGTTTTAGTGAATAAAGACATTTGCTTACCGTTTTATGTTCTGAGAGGCTAAGTTCAGTTCTATCATGAATAGTA
ATTTATGAATAAGAACCACAATTTTTTACCAGAGAATTGGAAAACCGCCCATACATTTCCATATACCCATCTCATTT
TTCTAAGTATCTATAACAGTTTGTGAACAATATTTCCCTCTTCGAAAATATAGCAAATAATTTTCTTCTCTATCAGA
TATGCATGCTTTGTTTACAGGTAAATACTCTGATTACCAAACCTACTATTACATTAGGTTGATGTTCTTTTCAACGTTA
GACAAAATGGATAAAACCTTGCTGCCTACTCAGAGATTTGGTCTGAGTGGAAATAGGCTTTTGTGGAGCTACAGAATT
TCTGCTTTATCTACTCAGCCAATAATTGGTCAGAGCATGAGCCTGGTTAGAAATAAGCAAAAAGCTTCTTGTATCCATG
AACAGAATGAACAGAAAAACAAGGTAGTACATTTAGCCTCCGAGAAACACGCGTTTACTTTTGAAGCAAGAAGCACCGG
GCAACCAGTGAGCAGCATATGTCTGAAATCTATTATCTGACATGTTCTTTCCAGCCTTCCAGGAATGCTGGTCTGACT
ACTCAGATTTGCTTTTACTTCTTGCTTTTGGATATAATGAGTTTGCCAAGCAGCTGTGAGTACCTGACTCTGGGGAAG
GTGGCTAGATTCCGAAGCGCTTATGTTTCATGGATCACCATACGCGATCAACATGCCAATTGATATTAAGCCACAGAGGA
GACGGTAAGTCTTTCTTTCTCTAGTTGTTTGTGAGTGAATAATGTTGTTTGTGTCCTTTGGTAAGTCTTTGGATG
TCTGCTGAAATGGGAGGGTCAGGGTGAGAAGTTAGTTTTATTCAACACACTGGATAGTTGGGAAAAAAATTAACCAGA
GAGGAAAGCTGGAAATAGTTTGTAGCTATTTAGCAAAAGCTGATCTGTTTTCAAGGTCTGTAGATTTTAAGAATTTGAGAG
ATTGTGAGTCTTGTATTGCCATCAAAATCACCATGATGAGAATTTGAAAGAGGATTTAGCCAAATAATGGATATATT
TATTGATGGCTATATGGCTGTTTATACCAGATGCCAGTAACCTATAATCTACATGTGACATTCCTTAATGCATCATAA
CACATTAATGCAATAAATGAGTTATAATTCTACAAAAACATTTGTTTTCTGTAGTTGCTAGGGAGGGAAGAACAAGGT
TATGTATTTTTCTATAAAAAAGTTGTCAATTTTAGATCTGTGTTCTACCCCCGACCCACCTTTTTATGTAGTATCAGA
ATAGCGATGATATAGTTAACTAATATGTCCAAAGTCACCCCTCAATTTTGGTTTTATACAACGTCATTTTCTTCAGCA
ATTAACAATGAACCTCAGAAGCATTTATAAAGATGTTTCCATTCTCTCTGTGAAAATTCATTTCTCCCTAATTTTATGA
ATCCACATAATGAAAATCCAAAATTTCTAAAAGCAATGTTATTTTACTTGGAACTGTCAATTAATCTTACTCTTCTACT
TTTTTTTTCTAATTATATCTACACAACTCACAAGCATGCATTTTGCCAGATTTTACCTTATTATAAACATGAAGGG
ATGTTTAAGTGATTAAAAAGTTTCTAAACCTTCAGAAAGCTTTCTGATTTTTGTGAGACAATATTTTATTCTTTTCTCC
AGAGTATCAAGGCTTTTCTGTCCAGCTCTATCACTATTTGACTTTATGACCGGCTAGCAGCACCAGCAACTATTTTAA
AATACATTCAAGAAAGTGTGTCTAAGACACCAACATGGCTCAGTTGCTGTGAGTTACCTCATTCCCTTCTTTAGTTG
GTGGGACGATACTACAAATCCATACAAAGTTGCAAAATCCACATGAATATCTAATGTCCCTGTTTATATTACCTTAATTT
TTCTGCTTTAAAGTAATCAACTTTTTGTACAAGTCAGTCAAATTATGTTTTTATGTATATTGTGTATATGCATAGACCC
AGAAAATTTAGACATATACCTATTTAGGCTTAAATTTGGGCATCAGAGTATTTTACAAGAAAATATATTTGAAAGG
CATTTTACAATAATTAGTATTTAATTGTATAGGTCTTGGGATTTGTAAAAATACCAGATCCATCTTTTCTTTTCAGTAGA
ATACATTACTTACCTATGGCTAGTAAATCAATTAATAAATTTTATATAAAAAGTTAACTTATTACATCTGGAGCTTTC
ATTCTACGAAAGGATAAATATGACAACAAACATGTAATGAAAACAATAGTTAGAGGGGTGGATGAATGAATGGAAGAAC
ATCCAAATCATAGAGGTTGTCTTTTTATTCTGTTACTCATTTTCTTAAGTTGTAAATTTTAAACCTCAACTTCTTTTG
AATCTGTTGAGAAAACAATACACTTGGAATGGTGAGTCATCATCTTAGATTCACTAAAATCTACCTAAGTTTGAATGG
TTCTTTTTTCAAGATGCTTGCTGGGACTAAGATTTATCTAAAGTAGCATGTTTATGTTTATTTTCATATCATCTCGGTTG
TGGTTTTTGGCAGAAAGAAAATTGTTTTCTAATTACTTAAAAAATCTGAGGAAGGAAGGATGGAAGGGAGGGAGGGAA
AGACATCTAAAGAAGAGTAGCTATGAGTTGATATTTTCAAGCTACCCAAAGAGCAGAGATTGCGGGACAAAAATAAAA
TAGAAAAAATTTGGCTTTTACGAAAATCCATAGAGAAAATGAAGTAGGAAATCAATGCATACAAAACATAGC
TCGATTTAAAGCTAAGTATATCCTTATAAAATAATGACTTTCTTGAAGAACAGCATGTTTTTCTTGGAAAAACAGGAAA
TAATTCACAAATTATTAGAAAATCACCTAGATTAGACACATGACCACATGATCATTTAATTGGTCTCAATTTTTATTTC
AAGAGCAGCAATGAAGACATCAAGAAAGCAGTTAACTATACTAAATCTTAAGTAACTCAATGTTGACGAGAATGACAAC
CCTACCATCTGTGATTATAATTACTTTCTATATTTGCGATTTAAAAATGTTTTCTTTTAAATTTTTTGGTAGCCTCTGTA
AATTGTACTGTCCACTTTTTCTTTTGTAAAGAAATATAATTTCTTTCAATTTTATGAAGCTTTTATGTCTCAATTTTA
GTATAGCAATTTCTTTTTTTTTTTTTTTTTTTTGTAGACAGGGTCTGTGTCTGTTGGCCAGACTGGAGTGCAGTAGCAATCA
TAGATCAGGGCAGCCTAGAACTCCTGGGCTCAAATGATCCACTTCAGCTTACCAAGTAGTTGAGGTCACTGTGCCAGGC
TAATTTTTTTGTTTGTGTTTTTAGAGAGACTGGGTCTGTGTGTTGCCAGGCTCTTCTCAAACAGTTGGCCTCAAATGA
CCCTCCTGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCAATCAAGCCTGGCCCTTCATACAGAGATTTAAA
AATCAGATTTAATCTGGCTCTTCTAACCCTACCTCACCCAATTGGACTGTAAAGTTTTTGTAGTGTGTGGATCACGTCTT
GGTTGTTGTTACTTTCCCGAGTGTCCAGCATAGAGCCCAGAACAGGTTAAATAATAAATGTTTGTTTAATAAATAAATGA
TTAGAAAATGCATGGTACATATTTTGGCATAGGGGCGTG
TGTATAAAATCACTTCCCTGTATGCCACAGTATGGAGTCTTTGGCAAGATTTTTGCTTCTGTTATTCAATTTGGATCAAT
TAAATTCCTTTTCTTGTGTTTCCCTGTAGAACTGCATGTAGCACTGACTTTAGATTACTGGCTTAAGTGGTTGGGGATC
ATGCATTTTGTCAATTACCAGGTGAGCAAGGAGAACCTGAAATAATTCACTTCTGTATTATATAAAGTATATATTTGTA
TATATGTAATG
AGGAGGAGAAAAGTCACTGTGGGAGGTGGCAGAGGGGAATTTCTAGAGGGAACAATACTGCAACTGTAAGAAAATG
TAAGAAAATTTAGTAGAAGCACAAAATTTTATAAAATCAGTTATAAATAATGACATATAAGCCCCAGTTCTGTGTCT
TGCCATAATGTAAAGTCACATTTTTTTTAAATCAAAATGGAAAATAAAACTAGTAGCAGTGAATGTGGTGAGACAGT
AGCCACTGGCACCCCAAGGCAATGGAAGCAAGTGCCCTTGAGCACTACTTTTTCAGCCGGGTGTGATGTTTTACCTC
ACCCAGCCGCTTCTTCCCTGCATTTTGGTGGCTTGACACCATTACTGTGCGGGCAGGGTGGGGTGGTAGGGGGGTGCT

260/375

TGTGGGAGTGCTGGTGAGGGTCCTTCCCTTGCTGCCTGCTCTGTGCTCCCTCTTTCTGGTGATGCAGCTGTTCTGGTAT
ACTCTCTGGCCTCTGTTTTTCTAAATCCTTTAGGTAGGCTTGCTCTCCCTATTATCGCTGGGATCAGAAAAAAGCAGG
GTACGAAGATCCAGAAGACAGGAAGGAATACAGTAAGTGTGAGTGAAGGTAAACCAGCCTGCTCTCTTCTGTGGAACG
ATCACAAGGTCATGCACCTTAGATTTATGACCAATCATCAAGCTATTAATTTACTCAAATGGTGTATTAATTTGTTAGGA
CGGTCATAAGAAAATACTACAGATTTGGTGGCTTAAACAGCAGAAATTTGTTTTCTACAATTCAAAAGCTGTGAAAT
CCAAGGTCAAGGTGTCAGCAGGTCTGGCTTCTCCTTAGGACTCTGGTTGTCTTGAGATGGCCACCTTCTCACTGTGTT
ATCTCATGGCCTTTCTCTGTGCGCAGGCATCGCTGGGATCTCTGTATGTGTCAAAATTTCTGCTTTTATAAGGACAT
CAGTCAGACTGGATTAAGGCCACCCATAAGGCTTATTTAAATTTTAATCTCCTCTTTAGTGGTCTATCTCCAAATAT
AGTCTCATTTCTGAGATACTGGTATTTAGGGCTTCAGCATACAAATTTTGGGGTAGACACAATTCAGCCCATACAAAT
GTGCTCATGAAATGATTTACTAATAATGATTGTGGAGAGAGATAGTAATCCGACTGTGAATCCTGAATAATTAGTGGCT
TCATGTTCAAAAAGTGGACTCAATAATGGGCATGAACCTGCACGAGGGAGGCATTGCGGAGAAGAATACGTCCCATTT
TCTGTACCAAAGAAAAACAAGTACACATTGCAAACAATAAATCTTTATCAAATTCACCCACCTTATTTTGAAGTCTATA
ATCATTCAAACGTGGCCTAGACTAACATTTGCTTTTTTATAGCTTTTATCAAGAGGAGTGGAGGTATTAATAATTATTAT
TGAGGGGTGTAGTGATTTTCAACTGACGCAATTCACCCCTCCACCTCTCATGCAGGGGACATTTGGCAATGTCTAGGGA
CTTTTTTTATTGTAATAAGTGGGAAGTAGCTGATGATTTCAAGTAGGTAAAGAATAGGGATGTTAAATCTCCTATAATA
CACACGACAGCCTCTCACAACAAAAAATTATTTGACCCAGAATGTCAAGTAGTGCTAAGGTGGAAAAACCTTATGTGAA
TCAATTAAATCAGGGAGAACTTCAGAGCTTTTTTAAGACCTTTATTTATATCTAGATGATTGATATTTTTTAGGTATTC
ATGAAAATACTTTCTTTTACCTTTCTGTGGTAAAGCACAAGATAACACTTTCTTGGCTGGTTAAAAATGGACAACCTGCT
ACACTTTTAAAAATAATAAAGCATTCAAGTAATTCAAACCATCTGTCTCTGATTTGTCTGAATTAGTGTGGCTTTAC
TGCATTTTTCAGGGCTTATTATTTCTTTTCAAGTAGGGAGACTACTAAGATTTTCAAGTAGTGGTGAATAATAGTATCAAA
ACATTATTGTAGCTCCAGACTAGGTAATAAACATTTGAGATATGCTTTTCAAGTAGTGGTGAATAATAGTATCAAA
CACATACACTTACATATATTAAGCGACCATCCTGTTGGCCTGGTATGTGAAGCTCTGCTGAAGCTTTGCTTAAATGCAT
GGACCCATCGATTGTGAATGTGTGACTACTTGTGTGTTTTTCATCATAACCAGCTCATCCTAATAGCAAATGATATGGTT
TGGCTGTGTCCCAACCCACATCTCATCTTTAATTATAGTTCCCTTAAATCTCCACATGCTGTGGGAGGGACCTTAGTAGC
AGGTAATTGAATCATGGGGCAGTTTCCCATGCTGCTCTCGTGATAGTGAGTGAGTACTCTGAAATCTGATGGTTTTTA
TAAGCATCTGGCATTTCCTCTGTTGGCACTCTTTCTCCTTCTGCTGCCCTGTGAAGAAGATGCCTTTCTTCCCTTTG
CTTTCCACCATGATTGTAAGTTTCCAGAGACCTTCCAGCCATGTGGAAGTGTGAGTCAGTTAACCATCCTTTCTATAT
AAATTACCCAGTATTGGATATTTTTCATAGCAGCATGAGAACAGACGAATACAGCAAAGAACAGCTTTTATGAAGGAAA
AACTTTGAAAACAAAGGGACTACTTTCTTTGATGAGAGGCCCTTCCCTTTCACTTTAAACAAAACCTTCAAATTATCCTCA
GAATTTGTTCTAATTCTCCCTACTTCTGGGTAAAAAATTATTAGCAGTAACAGATTTAACTTGAAATGTATATCTCCAGTT
CCCCATTCTCTTCTATGTAGTGCTGCCAACTCAATAGATTTGAAACAAAAATTACCCAGGGACCTTCCCCATCTCC
CATGTCCTTTTTTTCTTATGGCCCAGACCTGGAAGTCTCTTAAGTGCTTCTCTCCTCAGCCTAACCACTCTACCCT
ATCCAGTTGCAGGTACACTCTTCTCTCTTCACTCACCCTTTGATGCCATCTCCACTGCTACCCTCTTGGGTCCAACCC
TCATGTTTACTCTTGCTGAAAACCGCTAACTTTATAACTAGTCTCTGTTCTATCAACATCCTCTTCTGACTGTCTATCCA
CAGATCCACTTTCTAAATGCCCATCATGACGCTTCCATGCTTATACCCTAGCTTTTCAGTGGCTACCAAAAAA
AAAAGGTTACATTTCCAGCCATCATGATCTATTTCCCTTCCACATCTCTGCACTCCTTGTAATTTGCCCTTGTCAACCATG
TATACTGTGATTTTTAGGTATAAAATAACTACTAGCTATACCTATTTTGGCTAGAGTTCCATTCTCTCCTCATTTTGT
GATGAATCCCATCATTTCCACAGATCTTTCTAGAAAGACCTTTTCAATTTTCTATTTCCAAATGGAAGTGCCTCTCTTAA
CTAGCTGTTTTTCTTTCTTCTGTGTCTGTTACTGCACTATCATAATAAATCTTAATTTATATATTTCTATCTTTCTCT
CCTCCCTAAGAGTGGCATGATGGAAGAGTTGTTTTAGAAAAAATTTGGCAATGGAATGCTGCATTAATTGGAATGGAA
AAGAATGAATCCCTACACCAACAGAAGGAAGCAGTGTGAATCCTGACAGGGACAATTTCAATACAATTACAAAAATACA
TAAATATGTGATTACAATTGTGAGAAGTCTCAAAAGGAAACAAGGACCCAGTGAGAGTATAAAAAATAAGTACCTAACA
TAGTCTGAGTGTGTTGGAGAATGCTTCCCTGGGGATGATGAGGCCTGAGGATGAGTAACAACATACTCTGCTGAGAACCA
CATGAATGAAGCCCTGATGTGTTAAACTAAAAGGATAAGGTGTCTGAAGTGAATGAGGCAGAGAGGAGAGTGGCAAAA
ATAAACTGGAGAAGATGAGTAGGGGAGACTACTGTTTTCTTACATGCTAATTAACCAATAATTCTTTATTTTCAATTTG
GAGAGAAACAAGTGATTATTTATTAATTTATTTCATTGGCAATGCAATTTAAAAACATATTCTTTGTGTCTTATTTATCA
TTGAGGTTTTTAAAAACATTGAAATAAACAATAGGTAATATTTTCCAAGTGAAGTTAAAAAAGAAAAGGTGAGTTTTC
AAATCTATTCCCAACTGCTAGAGTTTAAATAAAAACTGTCAATAATGTTGACCTTTGTTCTGCAATCAGTTTCAAGATTTA
TCCATCACCAACCATGCAGCCTCTCGCTTGCCAAAAGGAGTGAATGAGAATTGTTAGAGTACTTGAATGTTTACTG
TCAGCAAAGTACAAGACACTACACAATCTTGATGACCTTTATATGATAGTCCCATTTCTATATCCAATAAGAGACATTA
AATTACTTAATAATTTCTTGGAACTTTCTTTTTAGTTTTTTATGGCTTTGCTCTTAAGTTGAAGAAAATTATTACATGG
ATGAATCAAAACGGAAGCTTCTGTTATCACCTTTTATCGTACTTTGTAACTATGATAAATGAAGTGGCGAATGCTG
ACAAAGCATCCAGGCTCAGGATGACCTTTCAAAGGCAAAAGAAGGTGAACAATCTACTAACAGCCTTTGAAACAAT
AGTCAGGACTTTGGACTTGGCCATAATGTTGTGTTTCAATTTGCCCTAAGAAGGTTGCTCTAGGAAGGAAAATAGTTT
AGTGGTGTGAGAGAGAAGGGCCCTAAGGGAAGAAATTTGATGAGAAGGATGTTACAGGTGTCTAAGGAAAAGGTAATC
AGCTCCTCAGACAAGATGGAATGTGCATTGAATTTGAAAAGATGGTCAGTGCTTTCATTGATGTTTCTCAGTAGAGCA
TGTTGTTACTCATCCTCAGGCCTCATCATCCCAGGGAATATTCTCAAACGCTCAGACTATGTTAGGTGCTTATTTT
TGTAATCTTACTGGGTTCTGTCTCCTTTTGAGCAGTTGTCAAAATTGCAATTACATATTTATGTATTTTATTGGCCTA
AGGGCTTCTCCTCCACGTTCAATCATAGGACCATGGAACAAGGTTGAAGCCTATGTTTTAAACCATTATGTGTCTGGTG
CTTTGTCTGGGTCTGGTACATAATAGATATTCAATAAATCTTGTAAATTCATTTTTTTTCAACTGAGAGTACAAAA

261/375

GTAATCAGACAGTAAATATATGTGTACCCTTTTGGAGAAACATTAAATTCATTCCATTAGCAGGCAATGAGTTCTTTAT
TTAAAAAAAGTTCTTTTCAGCAACTTCCAAATGTACATCTCAAGCTCTGACCACTCCTCCCCCTTTAGACTCCTACTAAC
TGCTTGGAAATTATTTTCAGTTGTTCTCATGGCCAAAATTGAACTCATCATCTTACTCTTACCATCTGGTCTTTTTCTTC
TATTTCTTTGTTGGATTGATTACTACAGAGTTATCTAACTAGAAACACAGGAGTCACCTTAGTCATCTTCCCTTTATCT
TAACACTGTCTCTCATCATCAAGTCTTCTTTTACCTATAATGTTCTTATATGAGTCCCTTCCACTCTGTCTTTATTAAT
ATTGCCAAGTGAATGTGAAGTCTGTAAGAGCCTCTGAAGTGATCTCCACATTGCTGGTTTTTCATATAATCCACCCCAA
GGTCTTTGTGTTTTGTGTTGGTTTTTCATTGCTATAGCAATATTCACATTTCTGCAGTACTAGTAAATTACACTAAAAC
GTACTGTGTTTTATAATTGACCTCGAGTATAAACATACAAATTTCTACTGCTCTGATGTTTTCTTTCTAAGCAATGGTTGA
ATCAAAAAACAATGAATTTGCCTAATTTTCATGATGAAAAACGTTCAAAATTTCTCCTAAGATTTCTTGAAATCCAAGCTT
GTGATTGTATGAGAATTCACAATAAACAGCTCACAAAATGTATAAACTTCAGTTTGTCTAGTCTATGAGGAATTACT
GAAGCATACGGCATTACTCATTGATTTTTAATTCAGGCAAAAGTTAGAAAATACACAAACACATACGCGTACGGAGGTC
TCAAAGTCAGTTGTGCGATAATAAATTATTTAACTCACCTTATGATAGGTAAACAGTTTCTCTAAATCGCCCTCCTGC
CCCCTGCTACCTGACTGAAAATATGTGCTCTGGTTTGTGCTGTTATTTTTGAACAATGTATGCCGGTATCCGATGTAA
GATGATTCATATGATACTGGTGTACCATGGCAATCCATCATGTATATAGCAAGAACACTGTGAATACCAGCAGCTCTT
TGTTCTCTTCAAGTTTCCATTTTCTTTCTTGTTTTTTTTTTTTTTTTTTCTTGTGCAGTAATCCAGTGGCTATGACATC
AAGAGTAACACAATCTAATTTTCTCCTTCTGTTGCTTGTGTTAGGATTCATACTCTGCTAGCAAGGGAGTTCTTGGCCA
TTTTGATTTGCAAGAGATTTTGTCTCTCCCTGATGTTTCATTTCTGTCAGCAAAGTCTTCCCTCTGGGGAACCACT
TGAATTTAAGGCTGATAGATGCTGGGAATCCCATATGATGAGTCTGTGGAAGCAGGACATTCCAGCCCTGGGGTTGC
TGTTGTCTCTGACTTCAGTATATGTTTCAAAGTCATCTCAAAATAAAGTAGGAAGATGAGTGTTAACCTGCACATCAGTG
GCAGTTTTTAAAGGTAAATTGCCATTTTTACTTACCACACTGGATTCTCCAAGTCAGACTAGGATTTGGGTTACAATGG
GGATCATTGGGGTTAAATTACTTAAAGGGATAATGAGATTTACACAGACCCATTAACTTTCTAAGCTATTGAGAAATTT
TACACGTACTGTGACTGAGGAGAACCTGATACTGTAAAAGAGCAATTCAGTACAGTTTCACCATCCAAGGACTTACCGA
TGCAAATTCAAATACACGTGCTAAGTAAAATGGGAGAGATAGAGCAAGGGAGATATAAAAAATTCAAAYAGAGCAATTC
AGATGCCCCATCTGCCACCACGTGCAATGGATCTATGTTCACTAGTAAGTGTGATTGAGGTAGGAGATGTGGATCTACC
ACTCTTCCCATCTCAGTTCCCTTGGTGAAGTCTTGAGTGTGAACATTTTGCCTTACATTGGGTGATTCAAGGGTTCTC
CACGGTAAAAGTGACTATGTGATTTCTTGCCACATAATCTAAGAGATGACTCCACTGAAGTTTGTGTTACTCTTACCAT
CAAAAGATGTATCTATGTTTACAGACATTTCTTTTATTTCAATTTGAAAAGAAATTTCAATGTCAATAATAATATTAGCC
TCATTTGTGAATTAACAGATGTTAAGATTGCATGCACGTCAGTAAAAAACTGTTGTACAGGAACTCTATGCACAGG
AGCCTCCTACCATGTCTCAGCTCAGCTACCTTTTTCTATTTCAGCTTTCTGCAAGTATTTATTTTATATAATGCACAT
GTAATAATAAGGATACAAACATGGATCATACAAAGAACCTGCCCTCATGGAGCTTAAAACTCAAAGACAGATGATAAGT
GCTAAACATAAATACTGTCCACAACATTAAGATATCAGTAAATTCATTTCATTTCATTAAATTCATCTACATTCCTT
GTGCAGCAAACATTTACTGAATAGGAACTGATTTCAAAATTTTCAGCTAGGAATGCAAAACCTGAGAGAGAAAAATCTT
AGCCTTCAAAAAAATCAAAGTCGAAGTCTCAGACAAAAATTCAAAGGGAAAAATAAATTATACTACATAAGGACTTT
AATAGTCTCTAGGAGTACATTAGACCAAAACACCTACCACAGCTGGGCTATTTCAGGGATTATCTTACAAATAAGGTCA
TGAAAGAGGATGAAGTACTCTCTGAAAGGCAGTGCTTAAAAAGAGGGTGGCTGGCAGAGAATGAAGTACATTACATA
GCACTTTGCAGTTTGCAAAGTAGATAGTCATATATTGTTTCCCTTTGACTATCACATCAACTGATAAGAAAACTGAGACC
CAGCAGATTCAAAGGTCTTACTGAAGACCATAAAGTTAGTTAAATGTGGCCAGGTGCAGTGAGTGACTCACACCCATAA
TCCTAGCAGTCTGGGAGGCCAAGGTGGGCAGATCATTTGAGGCCAGGAGTTTGAGACCAGCCTGGCCAACGTGGTAAAA
CCTCTACTAAAAATCCAAAAATAAAATTAGCCAAGTGTGGTGGCATGCACCTGTAATCCAGCTACTCTTGTGTCTGA
GGCAGGAAATTGGTTGAACCTGGGAGGCCAAGGCTGCAGTGAGCTGAGATCGTGCCACTGCCTCCACCTGGGAGAC
AGAGTAAGACTCTGTCTCAAAAAACAAAAAAATTTGTTAGGTAAATCCTGGAGTTGGGACCCAGGCACCATCTGAG
TGTTCTCTAAATATTGTTCCCATGTGTTCTGTTAAGTACCATGAGAGAGAGTAAAAATTTTGGCAGCTCTGAGA
AGGGAGAATTTACTTTCAACTGGGAGTATCAGGAATGCTTTGTAGATAAAATGACATTTGGTCTTGCAGCTTGCATTC
AGTTATGCAGAGTTGAAGATGAAGGGCATTTCAGGCTGGGAGAAACAATCTCACAAAGGTGTGGATAGGAAAAATACAT
GAACGTTTATAGAAAAAAATTTAGTGTGGTCAGAATTTATTGAACTTGAGAGGCAATCATGTAGATAGGAGATAAAAC
AGGAAAAGGAGAATGAGACTATATTTTTAGGGTCATGAAAATTAAGCAAAGGAATATTTTCTAAACTAAGGTGAGCTAT
TAAAGATTTTGAAGAGAGGGAGTCTATGATCATAGCTTTGCTTATGAAAGAATGAAGTGGCAGCAATGAAGACACACC
TTGGAATACCAGAAGACTAGAGTAAGGAGACTAATGAGGGGACTTATAGCAATCATTTGCTTTGCAGGTAATAAGGTGG
TAACTAATAACAAGATGATGGATTACAATATTAAATTTGTATTCTTTTAAAGTTCTATGTTTCTGCAATGGCTAAATGCA
AACCTATCAGGAAAAGTAAAGCGTTTTGTTGTTATTGTTGTTGTTTTGCTTTTCAAAAAGTGCAGGTAATTAGGGCCT
AACGTGGAATGGTCCATGCTAGGAATAAAGTAGATAGCGCGAATGTTTGTCTAGAGACATTGTGATGGACTGATCTGCC
CTACTATTACATCCTCAGCAATAAATATGAATGTTTAAAGTGGTACAATTGCCAGAAATCAGCCAAAGTTTGGCATAATT
GTTAGAGATTTGTTGGCTGTGGATAGAATAACATAATTTTGAATTTGTAGAGGAGAACAGAGAAGAAACCAACAAAAA
TAGTACTAGTACTCTGTCACTGGAAAGAAGTATGTTTAAAGGCCACACAGTGAAAGTTAGCCATGAGCTTGAGTGCTCTA
TCATTTTTTCAATTATGTTGTTTGTATTAAAAAAGGTAACAGCTTTTTTCTTTTTTAAACCAACATTTCTTACTG
GAAGTTCAATAGGTGTACAGTTGTTTTGTTTGGCTAGACATGGATATTTGTGTGTTATTCCCTTTTCAGTAGTTCTGAAA
ACCATTTTATCTTTAGATACATTATTTTCCAGGAGCTTGGGTATTTTATTGAAGCTGTTTCAATGCATTTAATGTCC
TTTGTAAATGGATTTCTTTATCTCTTCCCAATGCTCTTGGCTGGAGATGTTACTTTTTTATTTGCCTTATCGGTGTGAGC
ACCTCATTGCTATAATCAATAGATATAGTACTTTAGCATTCTGTACATTTTAAATATGATATATACCAATATAATGTAT
AAATGAAAAGTTATAGATAATTTTGTCTTAAAGTTTCTTTTATAGAGAATTGTTAAACAAAGGATATACAGCCAATATGT

262/375

TAAATAATACCTAGAAATTA AAAAGGAGTAAAGTAGAATAGTTTATCTGTTGTA CTAAGACTTCATACACAATATTTTC
 GAAAAGTGGGAATATCTCTTGGGTGAAATACTTCATATATGTATGTATGTATGTACATACATGCAATATGTACACACAGAAT
 TATATAAAATATATGTATGTATGTATGTATGTACAGAACATAAATTTTATTAGCATTTCCTTGTAATGGCATTTC
 ATTATAAATCCAATGACCTCAATTATTTCTATGGGTAAGTGCTAAGTATGTCAAGAGAGCTGGCATAGAAAATGGAAAAA
 GCACTACACCCCTTAGCTTGCAAGTAGATGTGAATTTTCTGCCCTTTGACTTTTGTGAATCTGTGATGAATCATATGTTT
 ACTCTGATTAACATAAAACATCTGGATGATCTAACTTTGGGGACACATTGCTTCATATGCACTGAATGCCTGAAAAATTG
 GTAGAATTTTAGATTCTTTTTCTTTATAAATGATACTACCCGAATTCCTGCAATACCTAGAGAGTTACAAGTGCTTAGC
 TCTGACCTTTTATTCCATTCAATTGAAGTTGTCCACCTTTAGTTTATTACACATATGACTCTTAGTAGAGCAAACATCT
 GGATTATTGTCAACAGTTCTCAAACACACCATTGGGATTTCATATCAGACTACGAACGAACCCCCCATGAAAAAAATT
 CAGGCATACAGGCTACACCCAGATCCTGAATAGCCCTGGTTTTCTGGTTACTATTTTCTCAGGCCAGATCCAAGAAGT
 CCTCTTTGGGCTTGTCTCTGGGATTCTCTGATAAAATTGGCTTTAGATTGAGACTGACGTGAAGATAGAGCTGGTCATT
 GAAAGACAGAAACAGATGTGAATGAAATAATTCTCTTTGAGACATAAAAAATGTAAGATATACCAAGAAAGGGGAAT
 TTGAGTTGTTTCATTTTCTGACAACCTGTGAAATTGTTGACCCGACAGAGAGTAGGGAGATTAACAATGTGATCATGTT
 CAGGGCCCACTGTGCCACTGAATTAAGACAATGTTGGCATTCCTCCTCAGTCATCTCCGAAAATAGAGATTAGAGTTA
 GGAAAGGAATAGCCTATCCCATTAACCTACGTCACTCATCTCATGCAGGTGACCTCTCATTTATGTATTTCTCAGGATAT
 AGACCAACGCTGGAGTATAGAAATATTATGAGACACTTCGTAATTTTAGGTCCTCTGGTACCACATTTAAAAGGTAAAA
 AGAAATAGGTAAAATTTATTTCAAGGATATATTTTATTTAACTCACTGTATCAGATTATTTTAACTTGTAACCAATATA
 TATAATTATTAATGAGATATTTAACATTCTTTCCTCATACTTTGTCTTTGAAATCCTGTATGTATTTTACTTTACATC
 ACATATTAATTTGGATGCCCAATTGTCTCAATTATACTGGATCTTTATTGGACATTTAGATCTCATAAGATTACAAAT
 TAGAAATATAGATTCACTTCCCAAGTTGTTCCAAATATAGTATTATTAATCAACTATCAGTCTTTTAAATTCATAAATA
 TTAAGTAAGACTAAAAATTTAGTCTTTTAGTCATACTAACCCCTTTCAAGTGCCCAACAGCCTCTTGTGGCCATTGGC
 TGCCGTATTAGACAGTTTCATATTTAGATTATCTGGGTTTGAACCTCAGAGCTGCGCACTCACTGACTGTATTGGCAAGTT
 GTTGCCAACCTGGGCAAGTTTCTCTTTTATGCTTCAGTTCCCTCAGTACCTGAGCACACCTTTTCTTGAAGAAGCT
 CTCCTGAAGAAAATCCCGTATTTTCTTCAGGACATTGCTATTTTCCACTTAAACTCAGAACCTTAGAGCTGATCAGTCTG
 AATCCTCCTCTCCCTCATCAGCTTTATCTGCCAGAAGGTCAAGTCTCTGAGATGTACACTGTAAAAATCTCATGCTTTC
 CTGTGACTTCATTTCCACTGCCACTACCTCTCCTTTTGCATGGATAGCTGCAATGATCTCCTATTTAATTAGCCTCAG
 TCTCCAGACTCTAGCCATCACTCCACATTATGCCCTCTGGATGCTGCTACTGAGTTTCATTTTCTGAAAATGGTATCTTT
 ATCATACTCTCCACAGTTCAAACATTTCTTCACTGCCCGTCACTTCCAGCATAAATCCATGTCTCTGTGAAACCTTT
 TTTGACAACCTCCATGCCAGATCCAAATGACAACCTCCCTTCTTGTGCTGTGATGGCCCTCCACACAGACTTCTGCCAT
 AGCCCCAGAGTCTTAGTCCACATATAGGAGTACATGGGCTCTAAGCCCTACACAGACTATTTTGTGTGTGTTATTTTG
 TTTTGTGTGTGTGTGTGTTGATATCTTGATATCTCTGTAACAGAGCACAGTGGTTTCTTGAAGTTTCTCATTTCTG
 TATGAGCTAGTGAATGACATTCCTTTGTCTGGCATTCCAGGCCTTCAGAATTAGCTCCACTTGACTCTTCTGGCTCCTT
 CTCTTGCTTTTTCATCCACAGATCCTCTGGTATAGACAAACTGGTGTATTACTGTCTCACAATATGTCCCAATGTT
 TGTGTCTCCATGCCTTGGCTCGCATCCTCTCCTCTTCTGAAGTGTCCCTGCATTCTTCTTGATCTGCCCAAATTTCTACC
 CTTTCTTCAAGGTCCAGTCCCTCCCTCTTCCATGATGAAGACTGCGGAGCATGATGCAATTCAGTGTGTTTCAAATTC
 GGATTGGGTGGCCTGATGGAAGGAGGCCAGGCTTGGGGTCCAAGTGGATCTGTTTCTTCTGTTTTCGCGCAAGTTGCCT
 ACCCTCTCTGAGGTTACATTCATATCTTTGAAATCACAGTAACAAAACATAAGGTGCAGAACTATCTTGAGTATTAA
 GAATAACGTGTGCACTGGCATTGAGTGAGGGTTGAGTGGAGCACGTGAACTCTGTTACTTTTCACTACAGTCATAGGAT
 ATGTAATCATGTAGCTTCTAAAATGTCTTTTCAATGTAAGATTGTTGTGTCATTTGGATTGCTATACAATTCATGCTTGA
 TTTCTAAACTAGACTGCAAGTGTCTGGACTGAAACAAATGCATAAATTCAGCAGATATGCACAGATATATATA
 TGTGTGTGTGTATGTGTATTTTGTGTGTGTGCACATGTATTGTAGATATCAAGGGAGAGAGGCACTTTTCAATGTGTAT
 TGATTCATTGAGTCCCCACAAGAAAGCATCATTTCTAGGAGGAAGTTGAAAATGTCCCTATTTTATCTATGAAGACTCTA
 GACTTGAAGAGTTTGAGTCTTCCCAAATCAGTCCAACCTCTTAAAGTGATAGAAGCAAAAAATTCACAGTGTTTACACA
 TCTTTTCCAAAGCTGTTTGATGTTATTATTTCCCGCATATCACATCTGTGAGATTATCTGCCTAGATCAATATATGTGC
 TAACCATCTGTCAATCTTTATCTACATGCAATTGTACCCAGGTTTCAGGGATTGTGGGAGGGAGAAAGGTTAGGTGGTTG
 TAAGAAGGACACTGCATAGTATGGTAGGCAAATACAGAATACCTGCAACAAGACAACCATGGCATTTCCTTTTTTTTTT
 TTTTTTTTTTTTTTGGATGGAGTCTCACTCAGTCACCCAGGCTGGAGTGTAGTGGCGGATCTCGGCTCACTGCAAGCT
 CTGCCTCCCGGGTTTCAGCCATTCTCCTGCCTCAGCTTCCTGAGTAGCTGGGACTACAGGCCCCCACCCTACGCCCCG
 CTAATTTTTTTTTGTATTTTTTAGTAGAGACGGGGTTTACCGTGTAGCCAGGATGGTCTCGATCTCCTGACCTCGTGATC
 CGCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCGCGCCAGCCAACCATGGCATTTTTTTGTAG
 GTCATCAGCATTGGTATCAAGAATAACAAATGACACTTGAGTTTCTTTTTCTGAAAAAGGGCAGGAAGAGTCTAATA
 GCAAGTGCAATTGCCACAGGCAACAGTGTATAACTGGAAAATCCTAAAATGTAGATAATTTTCTCCAAATGCTTTCT
 AACAAAAGATAGACAAGTTTAAATTTGGCTGATTTTCATATCTACCATAATATAGTACCAGCAATGCCAAGATACAGAAA
 ACTGCCTAAGAAAAACAGAGTTTCAAGACTTCGGATAAATTATCATCTTAAGCTTAACCTTATACCTATAAAAAATTC
 AGGGATATCAGTTATGACTTCTCATTGAGTAGTCTCATGTTAGACCAAAATAGTTTCCCATATTTTGGTGAAGGACCAG
 AATAACTTACCAGTAAATGAAACAATCATTTTCTTTTTGCTTTTATACTCATTCTGCATGTGATTGTATAGGGGATCAA
 GTCAAAGATTGCCAGTACAAAGTAACAACCTCTCATTTGATTGCTTAAGTTAATCATTAAATTTTTCCATGGGATCAATA
 CCCTGTAGAAGCATGAGATGCAGCAGTGAATCTCAATTTTCAATGTGCTTCCCAAGTAAGAACAGCCATGGGCGAGATTGT
 TGGGAGCCGTGCCATGAGCTACAGACCCTCAGCTCCCTCTATAATCAGTTCTTCCCCCACTCCAGTGCTCCCACTTG
 CCCTAAGCAGAGCGTAATTGTGGATGTGTAACCTACCGCAGAGGGGAGTATGCTTTTTATGTTGTTCAATTCTTCACTTT

263/375

CTCTTCTGCAATTGAAAGTTGAGCTGTTAGATTTCTGAAATGAAATGGTGACAAGAGAAAGTAACAGAAAGTAGCCTTT
ATAAGTGCCTGACTTCTGGGTAACAGAAGTGACTTAAAAAATAAAAGTACAAAACGTTGCATTTAATGTAAAGATG
ACTGCATTAGTACAACCCCTTGAAAACATTCAAGTCTTTTCAGAAATAACCAACCATTAAGGAGTTGACAAATATTTTATG
CTTTAAAGTATCCTATAAAAGTTTCATCACAGAAATAAAAAGCCTCTGTTCTTATCCTTCTCAACAAAGCCCTCTTGTA
TATAGATATTGAGTCTGGCTTACCTCTGTATCCTGTTGTGCTGATAAAACCAAGAACCTTGCAAAAATAGATGCACGATA
ATTGATATTTAATAAGTGAGCGAATCCATTAAATGAAAAGAGTGCTATTTTCAGAGAGCAGTGTTTCATTTAGATAGATGGT
CCCAGCGTCATTAAGTAAAAGGATAGAGAATACTTGCATATACATTTGGCGTAGTGTTAAGAATTTTTTAAAAATGTTTTTA
AATGTGATCTTTTTTATGGGCTGAATTGTGTCTCTCAAAATGTTGAAGTCTAACCCCTGGTACCTCAGAATGTAACC
ATGGAGATAAGGTCTTTAAAGAGGTGATTAAATTAATAAGAGGTCTTTAGAGTGGCCCCAATCCAATCTGAATGATAC
CTTTATAAAGGGAGGGAATTTGGACTCACAAAGAGACATTAGACACATGCACACAGAGACAACCATGTAAACACATGGT
AAGAAGGCAGCCATCTGAAAGCCAAGGAGACAGGTCTCAGAGAACTAAACCTGTTGACGCCTTTGATCTTGGACTTCC
AACTGTAGAACACTGCACAAAACGTATTACTGTCTGTGTAAGCCACCCAATCTGTGGTATTTTGTATGGAAGCCCTGGA
AAATTAATACAGTCTTTTTTATTTGCTACCTTTGAAAGCCCTCTTGTCAAATGACGGTAAGAATAGAAGACAAATAAG
TGTCAGTAATAAAGGGTGACGAGAAGAAACAACCTAGAGATGTGAGAGGACCAATTTAGGAATGGAAGGAGAGGAAAA
AATCAACAAAGTTGAGAATGCTAATTACAAAGTGCCACAGAGGAGGGCAAAACCAGCAACCATTCCTTTGTCAAAA
TCTTGAAAGATGGCAATTGAGGAACCAAGAATCTTAAAAAGGGGGGAAGGTGGATGAGAAATCTGCATATGAAGGGGAG
TCCTCCATAGGTTCTCTCTCACCCCTGCTCAGCTAGGAGACCAGTGCCACTTTATCCTCATTAGAATGGAATTTATGC
TATAAAAATAAATAAGAGAAGTCTTAACCTGGGGATACTAGGCACATTTGGAAGGTGAGAGAGTAAATGAAAAGTCTATCA
ACTGAATAGTGAAGTTCTGACTTCTCTAGTAGCACCTGGGAATAAGAACTCTGTCTAGTTAGCCTTATAATGCCAAGAGA
GGAGATAGAAAAATTGTTTTTCTATAAAAAATTGTCTAAAAAATATCTGCACTCCCATGTTTATTGTAGCACTATTAC
AATAGCTAAGATTTGGAAGCAACCTAAGTGTCCCATCGACAGACAAATGGATGCAAAAAACATGCAGTACCTATAAAC
AATGAGTACTATTTCAGCCATAAAAAAAGAAATGAGATTGTGTAATTTGCAACAGCATAAGTTGGAAGTGAAGACATTAT
GTTAAATAGACCAGGTACAGAAAGATAAACTGCATATGTCTCTCACTAATTTTGGTAACATAAAATAAAATACTTGAAC
TTGCCAGTTTCAGGGGCTCACGCCTGCAATCCTAGCACTTTGGGAGGCTGAGGCAGGCAGATGCTTGAGGCCAGGAGT
TCAAGACCAGTATGGCCAACATAATGAAACCCCATCTCTACTAAAAATATAAAAAATTAGCCAGTCATGGTGGTGATGC
CTGTAATCTCAGCTACATGGGAAGCTGAGGCACAAGAATCACTTGAACTGGGAGGCAGAGGTTGTGATGAGATCGTGC
CACTGCACTCCAGCCTGGGTGATGGAGTGAGACTGTCTCAAGAAAAAACAACAAACAAACAAACAAACAACTTGAA
CTCGTGGAGATAGAGAGTAGGATGCCATTTATCAAAGAGTGGGAAGGGTAGTGGGAGGAAGAATAAGATCTAGTATTT
GATAGCATAAGAGGGTGACTACAGTCAACAATAATTTATTGCATATTTAAAAGCACTAAAAGAATATAATTGGAATGT
TTGTAACACAAAGAAATGATAAATGCTTGAGATGATGGCTCCTCCATTTATCCTGATGTGATTATTACACACTGTATGC
CTGTATTAAATATTTTCATGTGACCCATAAATTCATATACTTACTATGTACTCATAAGAATTAATAAATAAAAA
TAACCAAGAAGAATTCTTCTTCAGAAAAATGGAATTACCACCCAGAGAAAAGACCTATAGTACTGGCATTAGATGGTTG
CCCAATAAAGAAGCCAAGGGTCTTTATTCCTCAATTACCCCATGTATTAGGCCATTATTGCGTTGCTATAAAGAAATAC
CTGAGAGACTGGGTACTTTATAAGGAAAACATGTTTAAATGGTTTCACAGTTCTGCAGGATGTACAAGCATGGTGCTGGC
ATCTGCTCAGCTTCTGGGGAGGCCTCAGGGAACCTGTAGTTGTTTCAGAAGACAAAAGGGGAGTAGGTGTCTCAAATGG
TGAGAGCAGGAGTAAGGGGGTGTGGGAGTTAGCACACACTTTTAAACAACCTAGATCTCAGAGAGCTCATTCACTCACT
CACCAAGCCATAAGGGATCTGCCACATGACCCAGACACCACGACCCAGGGCCCATCTCCAACACTGGGGATTACATCC
CAATATGAGATTTGGAGGGGACACCCAACTGTATCATTCGCCCCCTGGCCCCCTAAATCTCATGTCTTCTTACATGG
CAAAATGGAATCACTCTCTCAACAGTCTCCAGAGTCATAACTCATTCCAGATTAACTCAAAAGTCCCAAGTCCAA
ATACAAAATCTTGTCTGGAAATGAGTTCTCTCCACTTATGAGCCTGTAAAATTAACAAGTTATTACTTCCAAGCCA
AGGTACAATAGAGGTACAGGCATTGGGTAAACATTCCCATTTCTTTTTTTTTTTTTTTTGAATGGAGTCTCGCTTAGTCA
CCCAGGCTGGAGTGCAATGGTGCAATCTTGGCTCACTGCAACCTCTGCCTCCTGGGTTCAAGCGATTCTCCTGTCTCAG
CCTCTGAGTAGCTGGGATTACAGGCACCCGCTGTCTAGCCAGCTAATTTTTGTATTTTTGTAGAGATGGGGATTTTC
ATCACATTGGCCAGGCTTGTCTTGAACCTCCTGACCTCAGGTGATTACCTGTCTCAGCCGCCCAAAGTGCTGGGATTAC
AGGCATGAGCCATCATGCCTGGCCAACATTTCCATTCTAAAAGGAAGAAATCAGCCAAAAGAAATGACTTCAGGCCCCA
CCCAAGTCTGAAACACAACAGGACAGTCAATTAATCTTAAAGTTCTAAAATAATCTCCTTTGACTCCATGTCCACATC
CAGGTCACACTGATGTAAGGGTAGACTCCAAGGCCTTGGGCAGCTCTGCCTCTACAGCTTTTGCAAGGTGAAGCCTCCA
TGACTGCTCTCATGGGTTGGAGTTGAGTGCTACGGCTTTCCAGGTATAGGATGCAAGCTGCCAGTGGATCTACATTC
TGGGACCCACAGAACAATGGCTTCTTCCACAGTTCCACTAGGCAATGCCCCAGGGGGGATTCTTTGTGGGCAGGGCT
TCAATCCCATATTCCCTTCTGCACTACCTTAGTAGAGGTTTTCTGTGAGGACTCTGTCCCTGTAGCATGCTTCTGCCTG
GACACCCAGGCTTTCTGATACATCTCTGAAATCTAGGCAGAGACTAGGATCACTCTTTCCATTCTTTCTATCTGAAGG
CTTAATACCACAAGGAAGCCACAAAGGCTTACAGCTTACATGCTCCAGAGTGGCAACCTGAGCCATACCTGAGGCTCTT
TGAGCCACGGCTGGACTGGATGGACCATGATGCAAGGAGCAGCCTCCTGAGGTAGACAGTGTAGTGGTGCCTGTGCTT
ATCCCTTAAACCATTTAGTCTCTGTACCACTGGGACTGTGGTGGGAGGAGCTGCCTAGAAGATCTCTGAAATGCTGT
AAAGGCCTTTTTCCCATTTATTTGGCTATTAGCACTTGTTCTCTTTTAGTTATGCAAATTTCCCTAGCAAATGATTGCT
TGACGCTGCTTGAATTCCTCCCCAAAATGGCCTTTTATTTCTATCACATAGCTAGGTTGCAAATTTCCACACTTG
TAAGCTCTGCTTCCCTTTTAAAGTAAATAATCCAAGTTTATGTTTCTTCTGCTTCTGCACTGAGCATAGGTTATTAG
AAGCAGCCAGGTCACATCTCAATGCTTCAGTGCTTAGAAATGTCTTCCAGATACCCCTAAGTCATTAAGTCTTAAG
TTCAAACTTTTACAGGTCCCTTGGGCATGAATATAATGTAGCCAAGTCTTTGTCTAAGGTATAACATGGGTGACCTTTGC
TCCAGTTCTCAATAAGTTTCTCACTTACACCTAATACTTTGTCTAGCAGGACTTTACTTTGAGATCACTATCAGCATT

TTGGTTCATGACCATTTTAATCAGTCTCTACCAAGTTTCAAACCTTTTCTCTCATCTCCCTGCCTTCTCTCTGAGCCCTCCCAA
TTCTTCCAACCTCTGTCTCTTACCCAGTTCCAATGTCATTTTGACATTTTCAGGTATCTTTATAGCAATGCCCACTCC
TTGGTACCAGTCTTCTATATTAGGCTGTGTGGCATTGCAATAAAGAAATATCTGAGACTGGGTAATTTATGAAGAAAT
AGAAAATTAAGTGGCTTGCACTTCTGCAGGCTGTACAAGCATAATGCCAGCATTGTCTAAGCTTCTGGAGAGGCCTCAG
GGAGCTTTCATCATGGTGGAGCTGAAGAGAGAGCAGCTATCTCACGTGGCAATAGGGGGAGCAAGAGAGAGAGCGGG
AAGGAAGGTGTTACACACCTTTAAACAAAGAGATTTTATGAGAACTTGCTCAAAAGCTATAAGGGAACCACTCCCATG
ACTCAGACACCTCCCACCAGGCCCCACCTCCAACACTGAGGATTACATCTCAACATGAGAATTGGAGGGGACATTCAAG
GAACACCACCCTATAATGAACCCCAAGACTCTACAAGTCCAGTTAAATCATTCAAGGCTCCCAGTCAGTATTTTGTGT
CTCCCTGTTGAATATGAATAGATAGCCAAGTCTCCAACAACTCTGAGGAAATTTCTTCAACAAAAAGCCTAATGCAAA
AAATGAAAAATAATGATGATGATTAGGTTGATATAAAAAAGAGTTTAAAGAAACAAATAGACGTTTCAGAAAAATAAACTT
CGTAGCCCTAGACAGATGACAAGTTATCACATTAATGAAACAAAAGGATACTATACAAATTTATCAAGTAAGAACAAAA
GAGAGTTAGAATTTAAAACAATGAAAGAAGATGCTAATAAAATAAAATCAGAGATGAAAAGGGAGATGTTGCTGGGCACA
ATTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCCAAGGCAGGCAGATCATGAGTTCAGGAGTTTGAGACCAGCCTG
ACCAATACGGTGAAATCCCATCTCTACTAAAAATACAAGAAATTAGCCAGCTGGTGGCAGCTGCCTGTAATCCCAGCTC
CTCAGAAGGCTGAGGCAGGAGAATTGCTTGAACCTGGGGAGGCGAGGTTGCAGTGAGCCAAGATTGTGCCACTGCATC
CAGCCTGGATGACAGAGCAAGACTCTATGGGGGGGGGGGGGGGGGAAAGGAAAAGATAAGGAAAAGATAAGGGAGACGTTACA
AGCAATACCACAGAAAATTCAAAGGATCATTAGATGCTACTAGGAGCAACTATATGCAAAATAAATTGGAAAACTTAAAA
AATGATAAAATTCCTAGACAAATACAACCTACCAAGATTTAACCATGACGAAATCCAAACCTGAACAGACCAATACCAT
CAAGATTGAAGCCATAATGAAAAGTCTCCAGTAAAGAAAAGCCAGGATCTGATGGCTTTACTGCTTAATTTTGCCAA
ACATTTAAAGAGTAATATCAATCCTACTCAAATATTCTGAAAAATAGAGGAGGAGGGAGTACTTCCACACTTATTGC
ACAAGGCCAGTATTACCTCATACCGAAACAGACCAAAGGCACATTGCAACAGAAAACCTACAGGCCAATACTCCCAAT
GAACATTTATGCAGAAATCCTCAACAAAATACTAGCAAGCCAAATTCAGCAACACATTAATAAGATTAGTCATCGTGAC
CAAGTGGGATTTTCCCAAGGAAGCAAGGATGGTTCAACATAATGTAAATCAGTCAGTGTGATACATCATATCAATGAA
GGACAAAAACATATGATCATTTCATTTATGCTGGGAAAAGCATTGATAAAATTC AACATCCCTTCATGATAAAAACTC
AAAAAACTGAGGATAGAAGGAACAACCTGAACACAAGGAAAAGCCATATATGACAGACCCACAGCTAGTATCATATCGA
ATGGGGAAAAATTGAAAGTTTTTCTCCTCAAGATCTGTAAATGACAGGGATGTCCATTACCCCTTGAGCAATCAGACAG
GAGAATGAAAGGATATTCAAATTGGAAGGAAGGAAGTCAAGTTATTCTTGTGTTGCAGATGATATTATTTATATTGGA
AAAACTTAAAGACTTCCACAAAACACTACTAGAACTGGTAAACAGATTCAATAAAGTTGCAAGACACAAATTCACATA
TAAAAATCAGTAGCATTTCTATATGCCAATGGTGAACAATCTGAAAAAGAAATCAAGAATGTAATCCCATTTATAATAG
CTACAAAATAAAAAACCTAGGAATTAACCTTACTGAAAAGAAAGTGAAAAGAGTTCTACAATGAAAACATAAAAAACAGGATGA
AAGAAATTAAGAGAAACACAAAAAATGGAAGATATTTTCATGTTTCATGGATTGGAAGAATCAATATTGTTAAATGTAC
ATAGTACCCAAAGCAATCTTCAGATTCAATGCAATCTCTATCAAAATACCAATGACATTCTTCACAGATATAGAAAAAT
ATCTTAAAAATTCATGTATAACCACAAAAGACCCAGAATACTCAAAGCTATACTGAGCAAAAAGAACAAAACCTGGAGGAA
TCATATTACCTGACTTCAATAACACTACAGAGCTATAGTAACCAAAAACAGGATGGTTCTGGCATGAAAACCCAGGAAC
AAATTCATACATGTACAGTGAACCTCATTTTGGACAAAGGTGCCAAGAACATACATTGAGAAAGGACAGTCTCTTCAATA
AATGGTCTCTGGGAAAACTGGATATCTATATGCAGAAGAATGAAACTAGACTTCTATCTCTTGCCGTATACAAAATCAA
ATCAAAAATGGAATAAAGACTTAAAACTAAGACTTCAAACCTATAAAAACTATTGAAAGAAAACATTGGGGAACTCTCCAG
GACATTGGCCTGAGCAAGATTTTTTTTTTTTTTTTTTTAGACAGAGTCTCACTCTGTTGCCCAGACTGGAGGCTGAAGTG
CAGTGGTGTGATCTCAGCTCACAGCAGCCTCTGCCTCCTGGGTTCAAGTGATTCTTGTGCCTCAGCCTCCTGAGTAGCT
GGGACTATAGGTGCACACCACCATGCTGGGCTAATTTTTTGTATTTTTTAGTTGAGACAGGGTTTTTGCCATGTTGGCCAGG
TTGGTCTCCAATCCTGACCTCAAGTGATATACCTGCCTAGGCCTCCCAAAGTGCATGGATTGCAGGTGTGAGCCACTG
CGCTGGCTTGAGCAAGATTTTTTTGAGTAATACCCCAAGGCACAAGCAACCAAGCGAAAATAGACAAATGGGATCA
CATCAAGTTAAAAATACCTGCGTAGCAAAAGGAAACAGTCAACAAGGTGAGGAGACAAACCAAGAATGGGAGAAAAATAT
TAGCAAACTATCCATCTGACAAGGGATTAATATCCAGAATATATTAGGAGCTCAACTCCGTAGGAAAAAAATCTGATA
ATCCAATTAAAAAATGGGCAAAAACCTGAATAGACATTTCTGAAAAGAAGACATACAAATGGCAACAGTCATATGAAA
AGGTGTGCAATGTCAATTGGTCATCAGGGAAATGCAAAATCAAACCTGCAGTTAAATATTATCTCACCCAGTTAAATGG
CTTTTATCCAAAAGACAGGCAGTAACAAATGCTGACAAGGATGTAGAGAAAAGAGAACACTCCTACACTTTTGGTGGGA
ATGTAAATTAGTACAACCACTACGGAGAACAAATTTGGAGGTTCTCGAAAAAGCTAAAAATAGAACTCCCATATGATCC
AGCAATCCCACTTCTAGGTAGGTATACACCCAAAAGAAAGGAAATCAATATATCTGCACCTTCCATATTTATTGTAGCAC
TATTCACAGTAGCCAAGATTTGGAAGCAACCTAAGTTTTCCCTCAATAGACGAATGAATAAAGAAAATGTGGTACATATA
CACAATGGAGTACTGTTTCGGCCATAGAAAGAAATGAGATCCTGTCAATTTGCAACAACATGGATGTAAGTGGAGGATGTT
ATGTTAAATGAAATTTATCCAGGCACAGAAAGATCATCTTCACGTATTCTCACTATTTAAGGGAGCTGGAATTTAAAGA
ATTGAGATCCTGGAGATAGAGATTAGAGTGATGGTTACCAGAGGCTAGGAGGTGTAGTGGATGGGAGGAAGTAAGAAGT
GGGGATGTTTAAATGGGTACAAAAATATAATTAGATAGAAACAAATAAGATCTGGTATTTGATAGCTCAACAGGGTGACTA
CAGTCAACAGTAGTTTATCATACATCTCAAAATAACTAAGAGAATATAATTGAATTGTTTGTAACTTAAAGGGTAAATG
TTTGCAGTAATAGATTCCCTGTTTTACCCTGATATTATTATGCAATTGCTTGGCCTGTATGAAAATATCTCGTGGGCCCCAT
AAATCAATCAATCTATCTATCTATCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGT
CAACAGAAATTTAAATTTAAATTTAAATTTATGTTTTTGGAGACGTCTAGAAAAATTTGGTGATAATGTACACATAATCAAATA
AGAAGGTAAATATATAACTCCAGAAAAAAACAAAAGTTGTTCCATAAAATAAACATAAATTAGGCACATCATTTGGTTTA
TCAGTAAACGTTACTTTTGAGGGATGATACAAATAGAACACTGAATGTTTATTTAGCCAATAAATTGTTATATAACTGTAA

Fig. 6.259

265/375

TGGGAGGATAGAAAAGAGGGGAAGTAGAGAGGTGAAATGGTGAAAGAGTGTGAAATCTTCATCATTCAATAAGAAAAGTCA
 GTTAGAAAATATGGAATTTAAAAAAAATAGTTTGAAGAGCCTTATGAAGAGGGTGGCAGAAAAGACTCCTGCAACTTGT
 CTAAGCCCTGTGCATACAATTTGGGGTGTGTGGGTAGTTTAAATAATTATTTTGTAAATATAAAAAGGAACCAAGCAAC
 CAAATTTCTGGATATAAATGTCCGTGTGTGATTATCATGATAATAGGTAGACATCTTGGATTGGAATTTTTTAACATTT
 GAATGGAATACCCCATTTCCCTTTAATCTTTGATAGGTTTAAACATGGTCACTAACTGTAGAGTAGGGACTTGTCTGTC
 TCTTTATTGGCAGAAAGTGTGACTGGCTACCCCTGACCGTTCGGGAGAGGAGACATGTACACCTGGCCAATCAGACCAGC
 AGATTCACTGCTGGTGTAGTGAAGTTGCAGATGTCAGGGACAGCTTGTGCTGTTTCAAGTTAAATTATCTCACTTCAG
 CTCTCACTCTAAAGATGATTTATACTAGTATTCTTCACTTTTCACTCTTTTCACTAGCAAGCAGGATACCTTATGGAAAA
 TAATTAGGATGAAAAGAGGTCACTCTATCACAATAGTGAGTTTGTGAATTCACACTTTAAACGAGATGATCCTCCTTAG
 GAAAAGCAAAATAAAACGAATTTCCATGCCATTGTTGATTCTACTTGAGTTAAATACTAACATAAAAAGTTGGTTTTCT
 GTGCATAGCCTGGAGAAATCTTGTCTCTCAGAATTATCATGCCCCAGGCCATTCTTGCAGATTTTGAATTCCTTTTGTCT
 TCAAAAACATCCAGAAAATCTTTTGGACCTTCGGGTGGTTGGCAGAACATGTGTTGTGAGGGCACCTCAGTTTAGAAGA
 AAAGCCCTGAACTTAGTTCAAAAAGAGGGCTTTCCAGCATGCTATTTCATTTCAGCTTAGGACTGCCAGGCTTCCTGAAAG
 ACAGGTGTGTGAGAAAACAAAGTAAATAAACAGAACTCACAATGTCCAGACCTTTCTCTCCAGAGCAGCACAGTTCCCT
 TGCTGAGCGGCAACAGCCAAGGCTTTAAGCTGTTCCTCTCCCTTTTCTGTTAATTGAGAAAACCAATTGCTGCAAGAG
 CAACATCAGCAGAGCTAAATGTAAATGGAGTTTAAATAGAAAAGAGACAAATAACCCACTGAGAACCCCTAACATTTTCACT
 GTAATACCCAGAGTTCCACACCATAAACTTGGTATTCCAGTATAAAGCTCATCTCTCAATTGCACGCCACCCCTCCCCC
 ATCTTATTCACTCTCTTGCAATTATTAAGGAGTGATCTCCCCCATGGGATCAAAAATAGATAGATAGATAGATAGATAGA
 TAGATAGATAGATAGATAGTCTCTAATATATGTATTAGAAAACAGAGTCTGTGTTGCCAGGCTGGAGTGCAGTGGCATG
 ACCATAGGTCACTGTAACCTTTGAACGTTTGGGCTCCAGCGATCTACAGGTGTGCAGGTCTACAGGTGTGCACCACCATG
 TCCAGCTAATTTTTTAAAAATTTTGTAGAGACAGGATATCTCTATGTTGCCAGGCTGGTCTTGAACCTCTCTCTCAAA
 TGATTCTCTGCTTGGCCACCCAAAGGGCTGAGAATACAGGTGTGAGCTACCATGCCAGCCATAAACATGAAATTTTA
 CTTATGTTTTATGTATACCATGTGCACATAGCCTGAAGGTAAATTTTACACAATATTTTAAATAATTTTGTGCATGAAAC
 AAAGTTTGTGTACACTGAACCATCAGCAAAGGAGTCACTATCTCATGTGAGTACCAAAAAGTTTGTAGACTTTGGAGCA
 TTTTGGATTTTCAAGCATCTTGAATTTTAGGTTTGTGGATGGGGATGCTCAACCTGTATATATGCATACATGCATATTT
 ATGTAACATACATAATGGTACCTAAACTTAGCAAATACTCATATGTTAGCTATTATTTTTTGTGGTATTACTATGAAT
 AATAACTATTAGCATTTTCTCTCATATCTAAATGCAGTTGGTAAATGCTAAACTCATAGGAATGTTGTAAAGATTTAT
 TTTTTTATTTTTTTTATTATTATACTTTAAGTTTGTAGGTACATGTGCACATTGTGCAGGTAGTTACATACGTATACA
 TGTGCCATGCTGGTGTGCTGCACCCACTAACTCGTCTATAGCATTAAAGTATATCTCCCAATGCTATCCCTCCCCCTC
 CCCCCACCCACAGCAGTCCCAGAGTGTGATGTTCCCTTCTGTGTCCATGTGATCTCATGTTCAATTCCCACCTA
 TGAGTGAGAATATGCGGTGTTTGGTTTTTGTCTTGTCAATAGTTTACTGAGAATGATGATTTCCAATTTTCATCCATGT
 CCCTACAAAGGACATGAACTCATATTTTTTATGGCCGATAGTATTCCATGGTGCATATGTGCCACATTTTCTTAATC
 CAGTCTATCGTTGTTGGACATTTGGGTGGTTTCCAAGTCTTGTCTATTGTGAATAATGCCGAATAAACATACATGTGC
 ATGTGCTTTTATAGCAGCATGATTTATAGTCTTTGGGTATATACCCAGTAATGGGATGGCTGGGTCAAATGGTATTTT
 TAGTTCTAGATCCCTGAGGAATCGCCACACTGACTTCCCAATGCTTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG
 AGTGTTCCTATTTCTCCACATCTCTCCAGCAGCTTGTGTTTCTGCTGACTTTTGAATGATTGCCATTCTACCTGGTGTGA
 GATGGTATCTCATTGTGGTTTTGATTTGCGTTTTCTCTGATGGCCAGTGATGGTGAGCATTTTTTCATGTGTTTTTGGC
 TGCATAAATGTCTTCTTTTGAAGAAGTGTCTGTTTCTGCTTCTGCTTCTGCTTCTGCTTCTGCTTCTGCTTCTGCTTCTGCT
 TAAATTTGTTTGAAGTTCATTGTAGATTCTGGATATTAGCCATTTGTGAGATGAGTAGGTTGCGAAAATTTTCTCCCAT
 TTCTAGGTTGCCGTGTTCACTCTGATGGTAGTTTCTTTTGTGCTGTCAGAAAGCTCTTTAGTTTAAATTAGATCCCATTTATC
 AATTTTGGCTTTTGTGTCATTGCTTTTGGTGTTTTAGACGTGAAGTCTTGGCCATGCCTGTGCTCTGAATGGTAATG
 CCTAGGTTTTCTTCTAGGTTTTTATGGTTTTAGGTCTAACATGTAAGTCTTTAATCCATCTTGAATTAATTTTTGTAT
 AAGGTGTAAGGAAGGGATCCAGTTTTCAGCTTTCTAAATATGGCTAGCCAGTTTTCCAGAACCGTTTTATTAATAGGGA
 ATCCTTTCCCCATTGCTTGTTTTTCTCAGTTTTGTCAAAGATCAGATAGTTGTAGATATGCGGCGTTATTTCTGAGGGC
 TCTGTTCTGTTCCATTGATCTATATCTCTGTTTTGGTACCAGTACCATGCTGTTTTGGTTACTGTAGCCTTGTAGTATA
 GTTTGAAGTCAGGTAGCGTGATGCCTCCAGCTTTGTTCTTTTGGCTTAGGTTTGAAGTGGTGTGATGCAGGCTCTTTTTT
 GTTCCATATGAACTTTAAAGTAGTTTTTCCAAATCTGTGAAGAAAGTCATGGGTAGCTTGTGAGGATGGCATTGAAT
 CTTTAAATTACCTTGGGCAATATGGCCATTTTACGATATTGATTCTTCTTACCATGAGCATGGAATGTTCTTCCATT
 TGTTTGTATCCTCTTTTATTTTCAATTGAGCAGTGGTTTGCAGTTCTCTTGAAGAAGTCTTTCATGTGCTTGTAAAGTTG
 GATTCTAGGTGTTTTATTTCTTTTGAAGCAATTGTGAATGGGAGTTCACTCATGATTTGGCTCTCTGTTTGTCTGTTG
 TTGGTGTATAAGAAATGCTGTGATTTTTGTACATTGATTTTGTATCCTGAGACTTTGCTGAAGTTGCTTATCAGCTTAA
 GGAGATTTTGGGCTGAGACAATGGGGTTTTCTAGATATAACAATCATGTAGTCTGCAACAGGGACAATTTGACTTCCTC
 TTTTCTAATTGAATACCTTTTATTTCTTCTCTGCTTCTGCTTCTGCTTCTGCTTCTGCTTCTGCTTCTGCTTCTGCTTCTGCT
 AGTGGTGAGAGAGAGCATCCCTGTCTTGTGCCAGTTTTCAAAGGGAATGCTTCCAGTTTTTGGCCAGTATGATGATGAT
 TGGCTGTGGGTTTGTCTAGATAGCTCTTATTATTTTGAATATGTCCCATCAATACCTAATTTTATGAGAGTTTTTTAG
 CATGTAGGGTTGTTGAATTTTGTCAAAGGCCTTTTCTGCATCTATTGAGATAATCATGTGGTTTTTGTCTTTGGCTCTG
 TTTATATGCTGGATTACATTTACTGATTTGTGTATATTGAACCAGCCTTGCATCCAGGGATGAAGCCCACTTGATCAT
 GGTGGATAAGCTTTTTGATGTGCTGCTGGATTTGGTTTGGCAGTATTTTATGAGGATTTTTGCATCAATGTTTCATCAA
 GGATATTGGTCTAAAATTTCTCTTTTTTGGTTGTGTCTCTGCCCCGCTTTGGTATTAGAATGATGCTGGCCTCATAAAT
 GAGTTAGGGAGGATCCCTCTTTTTCTATTGATTGGAATAGTTTTCAGAAGGAATGGTACCAGTTCTCTCTGTACCTCT

266/375

GGTAGAATTTGGCTGTGAATCCATCTGGTCCCTGGACTCTTTTTGTTGGTAAGCTATTGATTATTGCCACAATTTTCAGAT
CCTGTTATTGGTCTATTTCAGAGATTCAACTTCTTCCCTGGTTTAGTCTTGGGAGGGTGTATGTGTCAAGGAATTTATCCA
TTTCTTCTAGATTTTCTAGTTTATTTGCATAGAGGTGTTTGTAGTATTCTCTGATGGTAGTTGTATTTCTGTGGGATC
GTTGGTGATATCCCTTTATCATTTTTTATTCATCTATTGATTCTTCTCTCTTTTTTTCTTTATTAGTCTTGCTAGC
GGTCTATCAATTTGTTGATCCCTTTCAAAAAACCAGCTCCTGGATTCAATTAATTTTTGAAGGGTTTTTGTGTCTCTA
TTTCTTTCAGTTCTGCTCTGATTTTAGTTATTTCTTACCTTCTGCTAGCTTTTGAATGTGTTTGCTCTTGCTTTTCTAG
TTCTTTTACTTGTGATGTTAGGGTGTCAATTTTGGATCTTCTCTGCTTTCTCTTGTGGGCATTTAGTGCTATAAATTTT
CCTCTACACACTGCTTTGAATGCGTCCCAGAGATTCTGGTATGTTGTGTCTTTGTTCTCGTTGGTTTTCAAAGAACATCT
TTATTTCTGCCTTCATTTCAATTATGTACCCAGTAGTCATTTCAGGAGCAGGTTGTTCCGTTTTCCATGTAGTTGAGCGGTT
TTGAGTGAGATTCTTAATCCTGAGTTCTAATTTGATTGCACGTGTGGTCTGAGAGATAGTTTGTATAATTTCTGTTCTT
TTACATTTGCTGAGGAAAGCTTTACTTCCAAGTAAATGGTCAATTTTGGAAATAGGTGTGGTGTGGTGTGCTGAAAAAATG
TATATTCTGTTGATTTGGAGTGGAGAGTTCTGTAGATGTCTATTAGGTCTGCTTGGTGCAGAGCTGAGTTCAATTCCTG
GGTATCCTTGTGACTTTCTGTCTCGTTGATCTGTCTAATGTTGACAGTGGGGTGTAAAGTCTCCCATTTAATATGTG
TGGAAGTCTAAGTCTCTTTGTAGGTCACTCAGGACTTGCTTTATGAATCTGGGTGCTCCTGCAGGTGCATATATATTTA
GGATAGTTAGCTCTTCTTGTGAATTGATCCCTTTACCATTATGTAATGGCCTTCTTTGTCTCTTTTGATCTTTGTTGG
TTTAAAGTCTGTTTTATCAGAGACCAGGATTGCAACCCCTGCCCTTTTGTGTTTTCCATTTGCTTGGTAGATCTTCCTC
CATCCTTTTATTTTGGAGCCTATGTGTGTCTCTGCAATGTGAGATGGGTTTCTGAATACAGCACACTGATGGGTGTTGAC
TCTTTATCCAATTTGCCAGTCTGTGTCTTTAATTGGAGCATTAGTCCATTTACATTTAAAGTTAATAGTGTATGTG
TGAATTTGATCTGTCTCATTTTGATGTTAGCTGGTTATTTTGTCTCGTTAGTTGATGCAGTTTCTTCCCTAGTCTCGATGGT
TTTACATTTTGGCAGTATTTGACGCGGTGTACCGGTTGTTCTTCCATGTTTAGCGCTTCCCTCAGGAGCTCCTT
TTAGGGCAGGCTGGTGGTGACAAATCTCTCAGCATTTGCTTGTCTGTAAAGGATTTTATTTCTCTTCTCATTATGAA
GCTTAGTTTGGCTGGATATGAAATCTGCGGTTGAGAAATCTTTTCTTTAAGAATGTTGAATATTGGCCCCACTCTCTT
CTGGCTTGTAGGGTTTCTGCCGAGAGATCTGCTGTTAGTCTGATGGGCTTCCCTTTGAGGGTAACCCGACCTTTCTCTC
TGGCTGCCCTTAACATTTTTTCTTTCATTTCAACTTTGGTGAATCTGACAATTTATGTGTCTTGGAGTTGCTCTTCTCGA
GGAGTATCTTTGTGGCGTTCTGTGATTTCTGAATCTGAACGTTGGCCTGCCCTGCTAGATTGGGGAAATTTCTCTGG
ATAATATCCTGCAGAGTGTTTTCCAACCTGGTTCCATTCTCCCCATCACTTTCAGGTACACCAGTCAGACGTAGACTTG
GTCTATTACATAGTCCCATATTTCTTGGAGGCTTTGCTCGTTTCTTTTTATTCTTTTTTCTCTAAACTTTCTTCTCA
CTTCATTTCAATTCATTTCACTTCCATTGCTGATACCCTTTCTTCCAGTTGATCGCATCAGCTCCTGAGGCTTCTGCAT
TCTTCAGGTAGTTCTTGGAGCTTGGTTTTCAGTCCATCAGCTCCTTTAAGCACTTCTCTGTATTGGTTATTCTAGTTA
TACATTCTTCTAAATTTTTTTTAAAGTTTTCAACTTCTTTGCTTTGGTTTGAATGTCTCCCTCCCTAGCTCAGAGTAATT
TGATCGTCTGAAGCCTTCTTCTCTCAGCTCGTCAAAGTCATTCTCCATCCAGCTTTGTTCTGTTGCTGGTGGAGAGCTG
CGTTCCCTTTAGAGGAGGAGAGGCGCTCTGATTTTATAGAGTTTCCAGTTTTTCTGTTCTGTTTTTCCCATCTTTGTGG
TTTTATCTACTTTTGGTCTTTGATGATGGTGATGTACAGATGGGTTTTTGGTGTGGATGTCCTTTCTGTTTGTAGTTT
TCCTTCTAACAGACAGGACCCCTCAGCTGCAGGTCTGTTGGAGTACCCTGCAGTGTGAGGTGTCAGCCTGCCCTGCTGG
AGCCTCCCAGTTAGGCTGCTCGGGGGTTCAGGGGTTCAGAGACCCACTTGAGGAGGCAGTCTGCCAGTTCTCAGATCTCCA
GCTGCGTGTGGGAGAACCACTGCTCTCTTGAAGCTGTGACAGGACATTAAAGTCTGCAGAGGTTACTGCTGTCT
TTTTGTTTGTCTGTGCCCTGCCCTGCCCTCAGAGTTGGAGCTACAGAAGCAGCAGGCTCCTTGAGCTGTGGTGGG
TCCACCCAGTTGGAGCTTCCCGGCTGCTTTGTTTACCTAAGCAAGCCTGGACAATGGTGGGGCGCCCTCCCCAGCCTC
GCCGCTGCCTTGCAGTTTGATCTCAGACTGCTGTGCTAGCAATCAGCGAGACTCCGTGGGGTAGGACCTCCAGCCAG
GTGCGGGATATAATCTCGTGGTGTGCTGTTTTTAAAGCCCTCGGAAAAAGCGCAGTATTCGGGTGGGAGTGACCCGATT
CTCCAGGTGCCATCCGTACCCCTTTCTTTGATTAGGAAAGGGAACCTCCCTGACCCCTTGCACTTCCCGAGTGAGGCAA
TGCCTCGCCCTGCTTCGGCTTGTGCACGGTGCAGCGCACCCACTGACCTGCGCTACTGTCTGGCACTCCCTAGTGAGAT
GAACCCAGTACCTCAGATGGAAATGCAGAAATCACCTGTCTTCTGCGTCTCAGGCTGGGAGCTGTAGACCGGAGCTG
TTCCTATTGCGCCATCTTGGCTCCTCCTGTTGTAAAGATTATAAAGTTGATAGATTTTAAATCCTTGGAATGTGCTT
TGTATATGGTGAAGAATAGAAAAGTGCCATCTTTCATTATTTTACCAATAGTAATAAAGCACAATTTGTATAGTAACT
TGTAATATAGTATATGCTCAATAAATGTTAATTAACCTTTGTGTTTCAATTTCTTAGTGATATATATCACTAAGGGAAT
TGATACTAATGTCAATGTCATGCAATTAATGGTAACATTAATATCTTCTTACACATTGGGCAAAAAAGAAAATACCAGG
CTGTGAGAACATCTTGGCCAGAAACCTCCCTTCAGCAAAAAAGACAAAAATGTGAGTGAAGAGAATATGCCCTTTGAGAA
TTGAGAGGGTTGCATTTTGCCTATTATGTATAGAGATTTGCCAATTTCCCTTTCAAACTATGACAGTGACACTGATT
CTGGATGAGCAACCTGCATAATGCTTCAGGGGCACATCTCTTCTTCTAAGGCTGCAGGCTTGGCGATGAGACAGAACAC
AGCCTCAATTCATCTGCTGTCTATTATCTGCCAATATAGATAGCAGATCTCTGTGGGTCTTGGACTGCTCAAACGACA
CAGTATATTTTAGCAACTGAAGGGGAACCACTTGAGATCACTAAAGGTGGAAAAACCTGATGACACCTTCAATCGAAA
GAAATGAGTATCCAAATCTGAAACATTAGGCCCCACAGTACAATGGCTCTAGTGACAGATAAAAAATACTATTTCTAA
CCCTTATAGAACTGACTTGTTTTCAAGAGCTCAAAGAAAACCTTTTATCACATTTATCTTCCACTTTTAATTAAGAAAT
TATTTCTGAAATGCTAAAACCTTTGTTTTATTATGATGTTTTAGAGGAAAGAGAGGAAGAGAAACCACTGTTACTTTCT
TGATGCTGTACCTGGCACCTGCCCTTGATTGAAGATGAGTTTGTGATGGTGTCTGAACCAAAAAATAACAAGCTTTTAA
AAATTATTGTCCTAAAAACCAGCAGATCAAACTACTTTCTTTTTTCTCAGAGGATTACAAAAGTATATGTTTGGAAAG
GCAAGTCAGTGAAGAAAAAGAGGAACGTCCCTAAATATTGGTGTGTCATTTATAATGTAAGACTTCACTAGATAAG
GATTATCTCAGGTGTGAATGGAGAAAGGTAGGATGCATGCAGTGTGGAAGCAGCCAGATTCAACACACTAAAATCATTA
ACACATATGTTTGTGTAGTTGTGTGTAATTTTGGGGGGAGAGGAATTTTGCCTTTAATTTCTCACTCCAACCACTT

267/375

GACCAATAATTGGGAATCATCTCTTTTATCCCCATTTTTTGCCCCCTGTTCTATATGTTATTTTTTTGAGATGTTCTTT
ATCATAAAGTGCCTTTACGTAGGCAGTATATAAGCAGTATGCAAAATTGAGTCCCCATCTCTGGCATTTGATCTCAAAGT
CCTTTTTTTGTTGTCAAATACCTTTGAATCTGTGTCTTCAAACCTCTGCTGGGTTCACTCAAATCAGTATATTTCTTTTC
CATATGTAGGTCTTTTGATTTTGTCTAGGTGACTCTTCTCTGAGTCCCTTTTACATCAGAAATTAACATTTTCCT
AATTATCCAGTCTAGAAATTTAGTCATCATTACTTTTCTTTTCATTCATTTTTAATATCCAATCCATCCTCAGGTTTC
AATTAATCCTTTTCTCAAACCTCTACTTCCCCGTCTTTCATTCTTCAGCTGAGTTCACATCACATAGGTCCCTCATCCAT
TCATGCCAGGACTTCGACAGCAGATACTAACAGGCATCAACCTCCAGACTCGTTAAATTAATCCTACACACTATTTCCA
GGTGACTTACTGAAAGTCTTTCATTTGATCCTGTCTACTCTCCCTTTTCAGGACTCTTCCAGCAGGTCACAACTCACATATC
TGCAGGAGCCAGGAGCTATTCAAATGGAGAAGGCAGGGGGATCCTGGGCAAGGAGGGTATAGATATATCCTCACCTGCA
TGCGCAGTGACTTCTGAGCTCCTCACAGTTGTTATCATGTGAAAAATATAGGCCAGGGTTGGCAGGCTTTCTGATTTTTTC
AAGAGAACACAGAAATTAGACTTTTAAAAAGTTGATTCAATAAAATATGACAAGGTATATTAGGGTTCTCTGGAAAGAACA
GAATTAATGGAATATATATATATATATATATAGACACACACATATATATAAAGGGTAGTTTATTAAAGTATTAAGTCA
CGTAATCACACGTTCCACAATAGGCCATCTGTAGGCTGAGAAGCAAGGAGAGCCAGTCCAAGTTCCAAAACCTGAAGAA
CTTGGAGTCCAATATTTAGAGAAGGAAGCATCCAGCATGGGAGAAAGATGTAGGCTGGGAGGCTAGGCCAGTCTTTCT
TTTCACATGTTTCTGCCTGCTTATATTCTAGCAGCGCTGGCAGCTAATTAGATTGTGCCACCAGATTAAGAGTGGGT
CTGCACACTGACTCAAATGTTAATCTTCTTTGGCAACACCCCTCACAGACACACCAGGATCAATACTTTGTATCCTTCC
ATCCACTCAAGTTCACACTCAGGATTATCACAGAAGGCATACTATGTTCTGAGCTTTCTTCTCTGTACTGTAAAAA
ATACAGCAGTGAATGAAACAGACAAAAATTTCTACCCCTTGTGGAGTTTATATTCCAGCTGGGAGTGAAAGATGAAAAATA
TTTATATATTATATATATATATATATATATATAGAAATATATATTTATTTATATATCTATATTTAAAAATATGTATGGGGAA
GATTTTGTGATAAATACCATGAAGAAAAGTGTATTAGAGAAGAGGTTAACGAATGTGTGTGTGGTGGGTGGTGGAAATTT
TAAGTGGTGTAGGAAAGACCTCATTGAGAAGGTAGCATGTGAGCAAAACATGAAGGAGGTACAAAAAGTCCCTCCTGCCA
TCATGGAGGGACAGTAAGAAGGTCTGGTGGCTGGAGTGAAGTAGCAAAGTGGAGAATAAGGGAAAAAGTTGGAGATGA
AACAGAAGGGGACTCAGAGCTCTATTCTTACTAGTGGCTTTGCCTTATTAAACAAAGACCTTTAAACAGATGTTAA
CAAGATCCCTCTGACTCCTAATTTGGAGATGACTTTAGGGGAATAAGGGAAGAAAGAGAGATCAGTGAGAAGCAGAATT
CTTTTTTTTCAGGGTCTTTCTCATTTGTTGTTCTCACTACCATCATCTTTGGACAGACAGGTACTCTTTTAAAGTCAATT
TGATCTAAATGTGGGTTTTTAAAAAATCCTTTTCTTTGTTTAAACAGCTGAGACAAAGCAGGAATTTTAAAGCAACACTT
TACTGACAACTATGTAGAATCAAAGTAACATGAAACTAGATAATTTGTTCTATCATAGGAGATTTCTATTCAAATGA
AGTCCCTTAGGAGAACTCTTCTCTGACTCCCTCTTCACACTGGACAGCAGAGGCCATCTTTAACTTTCCCAACAAGAG
AGGGCTCCACAAGACATAGTCATTACTCAAGAGATTGAGAATCAAGACAGAGAAGTTTAGTCTCCTCCTATGCTTACTT
AAGGCTCACCTCCTTAACTCTGATTTCTCTCTGGGAAATCTCTATTCTCTGGTGAAGTATAGTGGGATTTAGTACA
ACATTTAGGGAAGTGCAACCTACTCAAATATCCAAATATAGCACCATAATTCTAACACTCTAATAAGAGGCACATCCA
CGTATTTTCAAGGGTGGGGAAGATCATTAAATAACAGTATGAGTTATATTATGTTCTCAGTAAATATTAGTTACCTTT
TCTTCTCTTGGAGTGACTTTTACCACCTCTGTAACCTCATCTAGCCTTATCTAATGGGAGGCCATTTTATTTTGGGAT
GGCATGACTACATAATTTCAAGCTATTTCTTATGTTATTTGCCGCCTCTTAAATATCTTCCCTTACCTCCTTCTCATA
CAAACCTTAAAGTTCTTTCATAAGTCACAACAACCTTATAAGGTCTTTTACCTAACTGAACCGATGTCTTCTCTTTGCTGT
ACATTTACATGTCTATAACAATCATTTTTTCATTTAAATATGAAACTCTTGGATATAAAAAATATTAACTTGAAAAATAGT
AACCCTGATTTGCTCTTTTACTTTTAAACCTTTTGTCTTTGTTTATAAATCCACTGTGCAAGCTGTTTATGCAGC
AGAAATTTAGTAAACATTCTGTGAATGTCTGAAACATCCATTCAATCCACTCACACAAAAACATTAACATATACTT
TGTCATGCATTGTTAGATGTTCAAGCATGAAATCAAACAGTAGTGAAGAATAATTTATTGTAAATATTATTTTTCAGG
GAAGAGAACATTTAGAAATAACTTCTTGAGAAATTTGTTTGGGAAATAGTATATCCAAATTAGAGAGCGCCATCTT
GTGGGCAAGTGAGTATCTACACAAATAAATAAGTATTAAGTTGCAAAAATAGAATTTCTTCTCTTTTTTCTTACAA
TTCAAATCTCTTTTTTACTGTAAATATTGTATTGATGCATAAATAATATATATATTTAGGAGGTACATGTGATATTT
GATTCATGCATACAATGTGTGATGATCAAATCAGGGTATTTAAGATAACCATCACCTCAAACGATTATTTATTTTGTG
TTGGGAACACTTCAGCTCTTCCAGATATTTTGAATATACAATAAATTTATTGTTAGCTATAGTCACCTTTCTGTGTTAT
CGAACACTAGAACTTATTTCTTCTATCTAACTATATGCTTGTACCCATTAACTAACCTCTTTTCATCCCACCTCTCTCT
TCCCAGCCTCTGGTAACCATCATTTCTACTCTCTACCTCCAAGAGATCCACTGTTTTAGCTCCCACATATGAGTGACAAC
ATGCCATATCTGTCTTTCTGTGCCTGGCTCATTTCACTTATTGTAATGACCTCCAGTTCATCAAGGACACTTAGGTTG
ATTCCATATCTTGGCTATTGTGAATAGTGCTGCAATAAACATGGGGGTGCAGGTGTACTTTTAAATATACTGATTTCTCT
TCCTTTGAATAAATTCCTAGTGGTGGGATTGCTGGATCATATGATAGTTTTATTTTTAGTTTTTTGAGAAACTTCCATA
CTGTTTTCTATTATGGCTGTACTAATATACATTCCCATCGTCAGTGTATAGGAGTTCTCTTTTCCAGCACCTTCCCA
GCATCAAATAAATCTTTTAAAGAGGCTCTGTCTGTCTAGCTGAAGAAGTGAATAATATATATTAAATTTTATATAAT
TAATGATATTTTAAACAATCCTTAGAACTAATTGTAATATTTACAATTTACTTTTAAATTTCTTGAATAGCTAAAAAT
GAAGGCTCAGCAAAGAAATTACTAAATATCATAAACATGACATACTTTTATAAGAAAGCTTATAAAACTGTTAATGAA
AAAGGAGACAGAATCTTAGAGATTATCTCTTAAAGGGGTCTATCACTTTTTTGGGTATCTCAGGGTGCCTTGAAAATTT
GACTAGATCAAATCTCTCTTGA AAAATGTAAATGTACACACAATTTTTTCAATATAGTTTTCAGGGGCTTCACCAACTCCCC
TGCGGTTGACTCATGAACCCATTTCATGAACCTCATATTTTAAATACCTTACATTTTACATAATATACAATTAAGTCTAG
AAGGTTTGGGGTAAAGCTAAAATTTGATTCCATTATCTCTTCACTCCCAAAACCTCATGCTCACACAATTTTATAAG
ATTGATATAGATAGATCAAATCATGATGAAATATATTTGCTACATCGTTTGAGTTCCTAAGCTAAATCTTAAACTTAT
AGTTTCTAGGCTATTAATGTTCTTACATCAACAAAAATAAATATTTAATATTAGGTTTCATGTCATTTCATGGTATATCT
GTCACAAATACCCTTGATGTCCATTCTATCCAAATAAAGATGTTATTATGGATTTCCTTCTTTTTTCAGGGCTGGGTA

268 / 375

[illegible]

269/375

[illegible]

Fig. 6.26c.

270/375

GTCAC TTTT TTAGCCCTGGGATGGGATGATTGTCTCAGGTTTGGGTGTGTGGCTTAGTTGCCGTGCAC TAGGCAGTG
AAGACCAGGAAGGAACAAGGGCCTGCTGGAGAGGCCTGCAGTGTCTGATATTGAACATGGACTCCCTGTAAGCTCCCTG
GACTGTGGTAAAGCAGGACACATCACACACACACACACACACACAAACACACACACGTTGGACACACACTCATGCT
CCTCTATCCTTTTCTCTTCTAAATCTGCTTTCTGCCCTTGCCCTTTCCCTRTAAATGGATGTGTGGAGGAGCTGG
AGAGACAGCAGGGGTCTGAAGGATGCTAACTTGGACTTTTTCTGAGCAAAGAATTCCCTTAAGAATGACCTGGTATATAA
AATTTTGAAGAAATCTCATAAATAATATGGGCAAAAATGTGACAGCAATGTGGCACAATGCAAAAGCTTGTCACTAGTT
TCAGCCAGCTTTTCTCGTGATTGTTTTGAGTAGCATGAATTATCCTCTAAAATGTTGGTTTTTATTCTTTTTCATT
TTGTACAAACATACCTAAAAGGGTGAACATAGTATAAGCAAAGACACAACGTTGGAACTATAAGGAATAATTTTTCTT
AATTCATATGTATTTTTCTAACACTTTTCTTGGAGCTTTTAATCCTTAGAACCTAGGAGATGGAGGACTATACACTCG
GGTTTACTTTTCTTTTCACTTTTCTTCTGAATTCTTTTTTTTAACTTTTAAAGTTTCAAGGGTACATGTGCAGGTTTGT
ATATAGGTAACTTGGGTTCACAGGGGCTTCTGTACACATTATTTTGTCAACCAAGTATTAAGCCTACTACCTATTAGT
TTTCTGATCCTCTCCCTCCTCCACCTTCTACCTCTGTTAGGCCCTAGTGTGTGTGTGTCCCTCTTGTGTCCATG
TGTTACATCAATTAGCTCCCACTAATAAGTGAGAACATATGGTATTTGGTTTTCTGTCTTGCATTAGTTTGTCTAAAG
ATAATGGCCTCCAGCTGTATCCATGTTTCTGCAAAGGACATGATCTCATTCTTTTTTATGGCTGCAGAGTATTCATGG
TGTGTATGCACCACATTTTTTTTTTATCCAGTCTATCATTGATGGGYGTTTAGGTTAATTCTATGTCTTTGCTATTGTGA
ATAGTGTCTGAATGATCATACATGCCTGTGTCTATTATAAGAAATAATTTCTATTCTTTGGGTATACACCCAGTAA
TGGGATTGCTGGGTCAAATGGTATTTCTTTTTTAGGTCTTTGAGGAATTGCCACACTGTCTTCTACAATTGTTGAACATA
ATTTACACTCCCACCAACAGTGTATAAGTTGACTTTTTAATACTAGCCATTCTGACTGGTGTGAGATGGTATTTTCATTG
TGGTTTTGATTGTCATTTCTCTAATGATGAGTGATGTTGAAGACTTTTTCATATGATTGTTGGCTGCATGTATGTCTTT
TGAAAAGTGCCTGTTTCATGCTCTTGGCCACTTTTTAATGGGGTGTGTGTCTTCTGTAAATTTGTTTAAAGTTCTTTATA
GATGCTAGATATTAGACCTTTGTTGAATAGTTTGCAAAATTTTCTCCCATTTTATAGGCTCACTCTGTTGACAGCTTC
CTTCTCTGTGCAAGAGCTCTTTAGTTTAAATTAGATCTCATTGTCTAATTTTTGCTTTGCTTTGCAATTGGTTTTGGTGTCT
TTTGTCTAGCATATTTTTTTTTTTTTTTTTTGTAGATGGGTGTCTCACTCTGTCAACCCAGGCTGGAGTGGCATGAT
CTCAGCTCACTGCAACCTCCTCCTCCTGGGTTACGCGCTTCTCCTACCTCAGTCTCCTGAGTAGCTGGACTACAGGC
GCCCGCCACCACGCCAGCTGATTTTTTGTATTTTTTAGTAGAGACAGGGTTTCACTGTGTTAGCCATGATGGTCTCGAT
CTCCTGACCTCGTGATCTGCCTGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGTGTGAGCCACCACACCTGGCCTGTC
AGGAÇATCTTCACCTGTTCTGTGTCCAAGATGGTATTGCCTAGGTTGTCTTCTGGGRTTTTTATAGCTTTGGGTTTTTA
CATTTAACTATTTAATACATCTTGAGTTAAGTTTTGTATATGGTATAAAGAAGGGGTCCAATCTTCTGCATATAGTTAG
CCAGCTATCTCAGCATCATTTATTGAATAGGGAATCTTTTCTCCAATGCTTGTTTTTGTTAGGTTTGTCAAGATCAGA
TAGTTGTAGGTATATGGTCTTATTCCTAGGTTCTCTATCCTGTTCCATTTGTCTATGTGTCTGTTTTTGTACCAGTACC
ATGCCGTTTTGGTTACTGTGGCCCTGTAGTATAGTTTGAAGTTGGGTGGCATGATGCCCTTAGCTTTGTTCTTTTTGCT
GAGGATTGCCCTTAGCTATTCCGGGCTCTTTTTTGGTTCCATATGAATTTTAAATAGTTTTTTCTAGTTCTGTGAAGAAT
CTCARTGGTAATTTATTTAAATAAGCACTGAATCTATAAATTGCTTCAGGCAGTATGGCCATTTTAAACAATATGGATTCT
TTTCTGTCCATGATCATGGAATGTTTTTCTATTTTTTGTGTCTCTCATTGTTTTGAGCAGTGTATGTAGTTCTCTC
CTTGTAGAGATTTTCACTCCCTGGTTATCTGTATTCCTAGGTATTTTATCTTTTTTGTGGTGATTGTGAATGGGATT
GCATTCCTGATTTGGCTCTCAGCTTGACTATTGTTGGTGTGTAGGAATGCTAGTTATTTTTGCACATTAATTTTCATATC
CTGAAACTTTGCTGAAGTTGTTTATCAGTTTAAAGAGCTTTTGGGCTGAGATTATGTGGTTTTCTAGATATAGGATCGT
GTAATCTGCAAACTGGGATAGTTTGAATCTCTCTCTGTTTGAATGTGCTTTATTTCTTTCTCTTATCTAACTGCC
CTAGCCAGGACTTCCAAAATGTTGAATAGGAAGGCAGAGAGGCATCCTTGTCTTGTGCCCATTTTCAATGGTAATA
CTTCCAGCTTCTGCCCATTCAGTATGATGTTGACTGTGGGTATATCATTTGATGAGCTCTTATTTTTTGGGGCTGTTCCT
TCAATACCTAGTTTATTGAGAGTTTAAACATGAAGCGATCTTGAATTTTTATCAAAGGCATTTTCCACATCTTTTGAGA
TAATCATGTGTTTTTGTCTTTAGTTCTGTTTATGTGATGAATCACATTTATTGATTGTCATATGTTGAACCAACCTTG
CATCTCAAGGATGAAGCCTACTTGATTGTGGTGGATAAGCTTTTGTATGTGATACTGGATTGGTTTTGCCAGTATTTTA
TGGAGGATTCTTGCATCAATGTTCAAGAAATATTGGTCTGAGTTTTAAATTTTTTGTATATTTCTACCAGGTATTTG
TCTCAGGAAGATGCTGGCCTGTAGAAATGAGTTAGGGAGGAGTCCATCCTTCTCAGTTTTGGGGAATAGTTTACAGCAGG
AATGGTACCATCYCTTCTTGTACATCTGGTAGAATTCAGCTGTGAATCAGTCTGGTCTGGGGTTTTTTTTGGTTGGTA
GGCTATTTTATTAAGTCAATTTAGTGCTTTTTTATAGTCCATTCAGGGATTAGCTTCTTCTGATTAGTCTTGG
GAGAGTATGTATGTCCAGGAATTTATCCATTTCTTCTAGTTTTTCTAGTTTATGTGCATAAAGGTGTTTATAAATCTCT
CTGATGGTTGTTTGTATTTCTGTGGGGTCACTGGTAAATATCCCCCTTATCATTCTGATTGTGTTTATTGAATCTTCT
CTCTTTTCTTCTTTATTAATCTAGCTGGTGGTCTATGTAGTTTATTAATTTTTTCAAAAAAAGAACAACCTCTGGATTCT
ACTGATCTTTTGAATGGTTTTCTGTGTCTCAATATTCTTCAGTTTCACTCTGATTGTTGGTTATTTCTTGTCTATCTGCTG
GCTTTTGAATTTATTTGCTCTTGGTTCTCTAGTTCTTTTAGTTGTGATGTTAGGCTGTTGACTTGAGATCTTTCTAACT
TTTTGATTTGGGCATTTTATGCTATAAATGTCTGTCTCAACACTGCCTTAGCTATTTTCCAGAGGTTCTGGTATGTTGT
ATCTTTGTTCTCATTTGTTTCAAAAACCTTATTGATTTCTGCTTTTATTTTCAATTTTACCCAAAAGGCATTCAGGATT
TCAGGAGAAAAGGCATTAATTTCCATGTAATTGCATGGTTTTGAGTGAATTTCTTAGCCTTAGCTTCTAATTTGATTG
CACTGGTCTGAGAGATTGTTCAATATTATTAGTTCTTTTGCATTTGCTGAGTAGTGTTTTACTTCTGATTATGTG
ATCAATTTTAGAGTATGTGGCATGTGGCAATGAGAAGAATGATATCTGTTGTTTTKGGGTGGAGACTTCTGTAGATA
TCTATCAGATCCATTTGTTCCAGTGCTAAGTTCAAGTCTGAATATCTTAATTTCTGTCTTGTATGATATATCTAATAT
TTTCAGTGATATGTTAAAGTCTCCTGCTATTATTGTGTGGGAGTCTAGGTCTCTTTGGAGGTCTCTAAGAAGTCTTT
ATGAATCTGAGTGTCTCTCTGTGGGTGTGTATATTTAGGATAATTAGATCTTCTGTTGAATTGAACCCCTTAC

271/375

CATGATGTAATGCCCTTCTTTGTCTTTTTTATCTTTGTGGTTTAAAGTCTTTTTTGTGTCAGAACTAGGATTGCAACCC
CTGCTTTTTTCTGTTTTTTCATTTGCTTGGTAGATTTTCTCCATCCCTTTATTTTGAGCCTATGTGTATCATTGCATGT
GAGATGGGTCTCTTGAAGACAGCATACCAGTGAGTCTCGATTCTTTATCCAGCTTGCCACTCTGTGTCTTTTAATTGAG
GCATTTAGTCCATTTACATTTAAGGTTAATATTGTTATGTGTGAATTTGATTCTGTGCATCATGATGTTAGCTGGTTATT
TTGCAGACTTGTTTATATGTTTGTGTTTATAGAGTCATTGGTCTGTACACTTCAGTGTGTTTTTGTAGTGTCTGGTAATG
GTCTTTCCTTTCTATATTTAGTGTCTTTTTCAGGAGTCTTGTGAAGGCATGTCTGGTGGTAACAAATTCCTCAGTATT
TGCTTGTCTGAACAGGATATTATTTCCCTTTCACCTTATGATGCTTAGTTTGGCCAGATATGAAATTTGTTGGTTGGAATT
TCTTTTAAAGAAATGTGAATATTGGCCCTCAATCTTTTCTGGCTTGTAGAGTTTCTGCTGAGAGGTCCACAGTTAGTCT
GATGGGCTTCTCTTTGTAGGTGACCTTACCTTTCTAGCTGCCCTTAAACATGTTTTCTTTGATTTCAACCTTGGAGAATC
TAATGATTGTGTGCTTGGGGATGACCTTCTTGTGAAGTACCTTACCAGGAGTTTCTGCATTTCTGAATTTAAATGTT
GGCCTCTCTAAGTATAGGTTAGGGAAGTCTCATGGATAACACTCTGAAATATGTTTTCCAAGTTGGCTTCATTCTCTCA
TGTATTTTCAGGGACACCAATGAGTCGTAGATTTCAGTCTCTTTACATAATCTCATATTTCTCGGTTTTGTTCATTCTCTT
TCATTCTGTTTTCTCTATTCTTGTCTGACTGCTCTTATTTTAGAAAAGCCAGTTTTCAAGCTCTGAGATTTCTGAGATTTT
TTCTCCACTTAGGCTGTTCTGTTATTAGTACTTGTAAATTACATTATGAAATTTCTAATAATGTTTTCAGTTCTATCAGG
TTGGTGACATTCTTGTCTATACTGGCTGTTTGTCTGTGCTCAGTTCCTGCATTGTTTTATCATGATTTTTAGCTTCTCTCCR
TTGGGTTTCAACATACTCTGTACTTCAATGATCTTCATTCCAATCCATATTTTGAATTTCTATTTCTGTCAATTCAGCC
ATCTCAGCCTGGTTTAGAAGCTTGCTTTAGAAGGGACRCGGTTGTTTGGAGGAAAAAGGCACCTCTGGCCTTTTGAGTT
TTCAGGGTTCTTGTGCTGATTCTTTCTCATCTTTGTGGACTTTTCTACCTTTAATGTTTGGAGTTGCTGACATTTGAAT
GTTTTTTTTTCTTTTATCTTATTTGATGACCTTGAGGGTTTGATTGTGGTATTAGGTGGATTTCAGCTGATTGGCTTC
ATTTCTGGAAGATTTTAGGGGTCCAACACTCAGTCCCACTTCTGGACTGTGTGCACTAACTCTGGGGGACTTGTATG
AGGCCCAAATTTGTCTTCTCACTCTTCAAGTTTGGGAATCCACTCAGCTAGGGGTGCTGAGATGGGACAGCTGCAGTG
AAGTGCTAGTGGGTGTGGGGGTGCTGCTCCTTGCAGATGTTTCCACAGAGTGGCAGAGGCAATGCAAGTTACAGAGGT
GGGAGGAGGCCCTTGTCTGGAGCCTGTGTGCACAGTCACACTGGAGGTGGTGTGGCTGGGGGTAGGGTGGTGGCAGGC
ACAGGTCTGAATGCCTTCTCTGTGCCCCACAAGCAGGAGTGATAGCTCAGGGTAGGGGAGGATTCACTGTTCTCTGTAC
AGCCACGTGTTTACTTTTCAAATAATTTGATGAAGTGAAGTGAATTTAGACTAGCTGATTTTCAATTAACCT
ATGCTTAAACCTTCAATTTATACAATTTTTTCTTCAATTTTAAACCTTTGAACCAAATTTGGCTTGTAACTAACTAAT
AGATTCAATTAGTTATTTGGAATTTATTTCAAAGATGTGTCCAACATTTAGAGTTTAAAGTTTATATCTCTCAAATAC
AATTGCTGTAAAGTTTACTGGTTTATTTCTCAAATGATCATTGCTGGTTTATGTATATGAAATATTTCTCAAACATAT
CAAGGTACAGATAAAGCTATGAGACACGTAAGCTTCTTCTGTGTCCATTGGGTAGGTAGAGAAATGGATGACTTGGCT
TATTTAAGCTAATTACTAAAGGAAATAGAGAAGCCTTGAGTCTCTTCTGGAACAAAACAGAATTAATATTTCAATACAT
GAGGGAAGCATAATTTAGAACAATAATGAAATTTCCCTGGAGTCTGTCTTCTAAGAGGTTTGATGGATTCAATTTAA
CATACATTTATTTCACTCTACTGTGCTGGGCAGTCCCAGGGTTATACAGCCCCAGGAGGTTTCAGAGTCCAGTAGAACA
TGAGCATATACCACTCTTTTCTTTACAATACTCTTTAGAGAAAAGAAGACTGCAGTTTGCATTTTGGCCTGGGTAAAG
AAACAAATTAGAGATGTAAAGAACTTTGCTAAGCACTACAGATGCCTTTGACGTGTTTATTTCCCGTTGACTCATAACT
GTGCTTACCAGATAACCTATAGTATATTATACCSAACTTATCTTTTTCTAATACTTTAGTTATTAGTTTTTAGGTA
ACCTGAAGAAGAAATGAATATGAGCTTTTATATCTATGAGTAGGTTCACTTCCAATCCAGAGAAACCATGGACAGACCTT
TTTTTCAGCTAAACAAAGTGTGGTAGTTTAACTATCGCAGTAAGATCAAAACCACCTTAACTGAGTATGAAAAATATTT
GATGATACAGTAGTCTTCAAACCTAAGTTTAAAGATGCAAAATAGTACATATATGCCAGTACATTCAGGTGTCTTGAA
TACTGGGAAAAAGGAGGATTTCAGTGGGGGAAAGTTTACGACATTGTCTCTCTGCTCTAATCTTTCTGCTCAAGTCC
TTGCAAGTAGAATCAAAATATCAATTGTTCTGAAATTAATTCTGCTTTTTATTATTTCACTCCCTTGTTCAGARAACTT
GGTAAGTTTTCACTTCTAAATGGAACAAAGGTCCCCTCCTAACGTATCATTCAAGTTCCTTACAGTCCAGTCTCAAC
CTTTCTTTCTTTCTTTTCTTAACTATCATTGTTTATAATACAGTAATATACCTCCCAGGAGTATTCAATCTTTTGGC
TTCCCTGGGCCACATTGGAAGAATTGTCTTGGGCCCCATATAAAATACACCAATATGATAGCTGATGAGCAAAAAACAA
ACAAAAGTCTCATGATGTTTTAAGATAGTTTATGAATTTGTGTTGGGCCACATTCAAAGCCATCTGGGCCATGTAGC
CCACAAGCCACGGGTTGGACAAGCTTACAGGTCTAAACTCTGATAATTTCACTACACCTTGGATATTCTACTTCTGGT
GAGCMGAGGCTGCTTACACTTTTTATAGGCCAATATCAATCATAACGTTTAAAGTGTTTAATAAGTATCAATATTTATCT
CATATGGCTCTCAGAACAGTGAATTAATTCACTTAGCAAATATATATTGAACCATTACCACTATCTGGCCCTATTCTAG
TTGTTGGCCAAACAGCAGTGAATCAACATGTCTCTCTCTGAAAGAATTTAATTTTTTGTGGGGAGGATAGTACAAAAT
ATATGAAATACATAAACACATTCAAAATGTGTGTGCTGATGGTTAGTTCTATGAAAAAATTAGTGCAGAGTAAAGAAA
TAGTAATACGAGTGTGATTTTAGATTAAAAAGTCAGAATAGGTATCCCTGTCTGTTAAACTGACATTTAAATCTTAACA
AAATGAGTGAATTATGCATTTTCCAAAGGAAGAGTGTTCAGAAAAAGAAATAGCAAGTGCAAAGCTCCTTAGGAGG
AGGCACATTGTGTTTAAAGGAACAGGAAGAAGTTGAGTATTGTGGGAAGTGAAGCAAGAAAGAGAATAGAAAAGGAG
GCCATAAAGAGAGGAGAGGGCTTTTGAAAACCATGGAAGAGTGTGGATTATTTATCCCAAATGGAGAGGGAACTAGTA
AAGGGTTTTGAGAGAGAAATGGCATACATTTCAAAGGATCACTCTGGGTGCTCTGTGAAGAATAGAGTAGGAGCAAG
AGTAGAAGCAGGGAAAAATGGTTATGACGCCACTGCAATAGCTTGGAAAGGAGACAGTAGTGACTTGGACCYGGGTGATG
GCAGTGGAGATGGCGAGAAGTGATCAGATTCTGGCAATGTTTTGAAACAGAGCTAATTGTGTTTGATGACGGATTTTT
ACATAGAGTGAGAGAAAAAGAGATGAGTCAAAGATAATTCAAGGGTTTTTGGCCTGAACAAATTTGAAATGTGTGTTTT
TATTTATTGAGCTTGGAGAGTTCAAGGGAGGAGTAGGTTTAGTGGTGGGGTGGTTCTGTTTGTGAGCATTTTGTAGTTTGT
AGTCTGTTTGTGGAATGCTTGGAGTGCTGCCCCATTTCCCTCCACCCACTATAGAGTTACCTGAGGCTATGGCAG
ACTCAGTCAGTTTCCCATCTCAGGCACCTGGGGGCTTTCTGCAGTACAAAGGAGCCTGCTGAGACCGTTTACAGAATTT

TTTAAACATTCCCAGTGGGCAACACTCCAACATTGAGGGTCCAGAGTTGGTGCTCATATACCCAGGTTCCACACATTCTCCA
GTGGGACAGTCTCTGAGGCATGTGTATATATGGTCCCACAAAAGGTCCTTGGGGAGATTGGGCCCCATCTGCCCCTGCTT
ATTAATACACACTGTATTAACCTTTTCTTCTTTGCTATCCCACTTCTCCATCACCTAACCTTTGATTTCCTAGAATCGCC
TTCCTGCCTCTTCTCCAAATAAACTACGCACTCCAATATTTTGCAGTCTCCCTGGAAGGAATTAACCTAAGACTATTA
AATACCATATGTCAATCTCCAAGAAGGAGATTGATATACTATTCTGAAAACCAGGCAAAATGTCAGGGATGGAGATAC
AGTTGGGAGGCGTTAGTCTTTTTTCACAAGCCTATTCAAAAAGCCCATTTGCACAAGCACTAGATATGTGTAGATTCTTACA
CAGACTTGTATACCGTCCTTGTCTGCCTCATGTCTCTTCCACATGAATACAAATGATACTCATCAATGAATGCTCTGA
ACTTTCAGCAAAAGGCCACAGTAGAATTTCTAGATAGTAGTAGATTGAGAAGTGATGACAAATTTGATTGGAAAGCTAAGGG
ATCTTGGGGACTTGTCTTGAATTTGCATTTACATAGAAAAGCACATCGTTTTTATGTTTTGAYACATATTTATTTGTGGTG
GGTTTGGAAAACCTTGTAGCGGTTATGGAGGGGCACCCCAACCCATCCTTTGGTGTTGCCATTGCTTTTTAATTATGAT
TTGTGCTAAGCCACACATTTCTATTTTACCTAGCTCAGGGTCTAAGCATGTTTTTCATGATGGTTTGGTTAGGAAAGT
GAGTAGCAATGAATGAGCTCCTCAATAAATACATAGCACAGACACTGCAGGCAAGTGAAGTTTGTAACTCACTTCCCA
ATCAATTGTTTCAACTGAATGTGAAAGAAATCATTTTCTCTCTGTTTGTAGTCAGAATATCATATAAAGCACAACTCT
TCTGACATACATTGTATCATATTCCACAGTAATTTTACTTTTTTGCAGAAGATCCAAAATTTGGTTTTCTTGCTGAG
CAGTTTATCCAGATAAATTGCAAAATCAGTGGAAATCATTTACATGAATAAAGATTTTTTATTTCTAATTAACGTGCTAAATCAA
GCACACCAAAATGTCTCTAATTCTTATATTACTCAAATGGCAATATTTTTTGTCAAGTACTATCATATGAAAATTTTCAAGGTG
CCTAATGCATTTTCAAATGGCACTCATAAAGCATACTAACGTTTTTATAAAATAAATGTCTCCATATTTTTAAGATGAATGG
ACAATTTTTGATTTTTTAATRTAGTCCCCAATTTTTCAATTTTTCAATTTTCATTTACCGAATGGAGAAACAGCATTTCATC
AGAGCAAAAGAGCAAGTTTACAAGTCATGGGAACAAACATAGATGCTAATTTCTATTTTAGGAAGTTCTTTTTTAAAG
TATTATCATTAAGAAGCACAACTCTGTGGAATATTTATGTGCACATTTAATAATAGAGAATTCGGATGTCAAGTCTGTG
TGTTACTCATACCCATACATGCATCCTCAAAAAGCCTTGGAAAGTTAATCCTCAGCTGATGAAAGCTAAGCAATTGCTCT
GGAAGGATACTTGAAAGTTTTTGGCTCTTGGGGTGAAGGTACAGTCCAGAAAACCTCTCTTCACAAGAGGGGCGCTGTGCA
AACAGCTAGCTCCTCGTGAAGGAAAAATTGCCTTGCAGACTGGCACGAAGTGGATTTCTTTTACATCTATTAAGTGCTCTG
CTCTTCATAAAGGAAAAATTTCTTGCAAAACCTGGCACGAAGTGGATTTCTTTTACATCTACTAAGAGCTCTGCTTCTTTCT
CTCTCTCTTGCTTTTTTCTTGGCATGCCTCTTCTTAGGCTCTGTAAGGCAGACTTCTTGTCTTCTCTAGTTATGCTTCT
GCAAACTGCATCATGCTGATTCTATTAATGATTTGATTTTAAATAATACCATCATAGGTGTTAAATGATGTGTATGCCT
ATCTGGCTTCTCAGGACTTCTCTCTCATCTACTTACATCTCACCATGTGTAATAATCTATGAGACATCTTTAATTTA
ATATGATTTCAAAAGCTTTTACTCTTGACCTTTGTTTGAAGTCTAATCACTAAAAACCTAAAATTCCTGGTGGGAAAAA
AAGAAAATTGACTACTCTAGTTTTTTTAATAACATGTATTTTCATTTATTCTGATTATAAAAGTCATCTTTATTATTGTA
GAAAAATATAAAACATTATGGAAAAATAAAATTTAAAAACATCTATCATTTCTATTACCCAGAAAATAAAGTATCAACATTTT
GGTGATATTTTTAATGAATAGATTTTTTAAATGAGAAATGCTTTTTCAGGAGTAATTAGATTCTACTTAGTATTGACAATT
TTATAATATGCTTTTTAAACAAAGTATTAACATTAACCTTTTTTGGAAAATGCCACTTTCTGCTACTTATAGCTGTATTGG
CTATTTTCTCAGAACTTCTGCTGTAATGAGTTTATACTAGAGTTGCAAATACAGTTCTTTGAATGTACTTGAGGAGTC
GATAGTCTGAATCTGAGATTTTCCACAGCTCTTGGAGCACCTGAGAACACACTAGCTTCTTCCACGATTCTGCAGTACT
TGCTCCTTCTCTGATAGGATGCCTTTGTAAGCGTACAACCTCCAAACATGGGCTGAGTGTTTCAGTAATCATTTGTGTTGAG
TCTTTCAGTTTCATGGAGACTAAAATTAGGTTTTCTCTGTCTACTCTTGTAAATGTCTGACCTTGACCTGCATTTTCAA
ATTGCTGAGAAAGTTAGCAAGCTGACTTTTACACTAGGCACATCAGAAAATAATTGATTAAAAATAGAGTTATTGAAGTTG
AATTTTTTTTCATTTATAGAAAAGTACAATGTCTTGTTTCATGACAAAACAAGGCCTAACATTTATATAATGTTTCATTTTAA
ATATATCAAAAGAAAAAATAAATAAACCACAGAAAACCCAAAAACAACCTACCTATTAAACATCTCTTGATTTTA
TAAATATTATAGTTTAGTTTGTACAATATCAGTAACTGTGGAAAGCTCCCAATTATCTCATTCCCAAGTGCTTGACTGA
CTCATAACTTACCAACAATTTTCTTATTTTCAAGAGAATCCCAAAAACATATTAACCTAGGACTAACCTGGAATAAACTTC
ATGGTTGATAGCTTTTATCAATTAATAGGGTATTGATTTKGATAACTATAATCTTGAGCATATCTTTAGATTTTACTTT
TATCTCTGAATTTATTTTTTGTAGTAAGATTTAGAAATTCAGATTTATTTTGTGCTTTATATGACATAGAAAAACAA
ATTGTCTTTTCTGTACAAAAGTCCACCCTTCAAATAGACTCCAGAAGAAAACATAGAGACTTATAACTTAGGTTAAACA
TAGGCACAATCCTAAATAGTATTTCAGATGAGTCTTACCTGAATAATTGCTCACCTAATATGATAATCACCTGTTAAGAA
GCAGTTTCTTAAATGTCACTGTTGGAATCTAAACAGTAGATACACAGGTGTTCACTGTAACTTGTTTTCAATTTTTCTG
TATTTTTGAAAATGTTTATAATACCATCTTGGGGGAAAAAGCCTCTTTTTGACATGGCAAGAACCATATTCTACTGAA
ACAGATCTTATATGCTCTATCAAGTTTATATTTTAGACATCCCTAATTCAGCTCATTCTGGACTATTCCAGGACTGATT
GCCCTACTAAGGCATGCTTATTTTTTTCTTTATGTGTATAAGAAGGATTCAAAGGGACCGTTTGTGAGTTTAAATGTGT
GAGCACTACTGATATGTTTTATTGAGAAAAAGCTTACTGCCACAGATCACAGAGATATTTTTCCGAGGTAAGATTCTTG
CTGGTTTGCAAGTTTGTGAAGGAGGCACAGGACCCATCTCTGTACCCCGAGCCACGGAGCCCTTATTTAGACCCACAC
TGGGCTGAAAATAGAAAATTTCTGTACAAATGTATCTCTCTGTGCTCTTTCCACTTTAACAGAATAGAAAGAATTGACTG
GTTGAGCCCAATATTTCCCCCAGGCCAGWGTTACAAACTGGCGTTTACCACAAAATAACTCATTGATATGTTTTTAA
GGCTGGAGTGCTGGAGTTCAGTGGCACACTCAAACTCACTGCAGCCTCGATTCCCAGGTTTCAGGTGATTCTCCACCT
CGGCTTCCCAAGTAGTACTAGGACCCAGGCATGCCACCACCTGGCTAACTTTTCTCTTTTTTGTAGAGATGGGATC
TAGCCATGTTTTCCAGGCTGGTCTCCAACCTCTGGGCTCAAGAGATCTGTCGCGCTTGGCCCTCCCAAGTGCTGGGATT
ACAGGCATGAGCTTTCATACCTGGCTACCTTCTTCTTAATTATATACATTTTTTCTTAAATAAGAGCCATGTTTATTTTT
TATTTCTATAAAATATTTTATATTCTTCTCTTCTTATTGCCCTGATACTTTAAATAAACCTAAGCCAGTCAAATTTTG
TATTACCCTTGAGTTTCAGTTTTTGGTTTCATTTCAGCCCTAAGTTCTCTTTGGGCATGAATTGTTTTTACCATTGACTAC

273/375

TAGCAGGCAGCTGGCATAGCCTGGGACATGTGAGGTGATGCTAAACATGCATTTGTGAGTAGAAGGAAGGAAGAAAGGA
GGGAAGGAAGGAAGGAAGGTAGGTAGGAAGGAAGGAAGGAAGGTAGGTGGGTGGGCAAGAGAGAGGGAGGAAGAAAAA
AGGAAGGGAGGCTGGTTGGTTGATTAGCTGTTGAACAAAAATCCATATAGAAAGTAGCTTACTAGTCTATATCTTTTA
GCTCTGTTTTATTTCAAAGCTTTGTGTGTTTTTTGTTAGGGTCACTTATAGAATATTTAGAAAAATACTTGCTGCCTCATG
CATTTTACCATCCAGTGCCCTGGTGAGACCTAAAAAGCCCATAGTTATAATTTTGTTCCTTTGACCAAAGTTTGTTTTTATT
TTCAAATATAAATTCAATCCCTTAAGACTCACCTATAGCATATATATCAAACAAAAACAGTCAAATTTAACTCAGAAT
TTTGCTGGATAAATGATTTTACTGGATATCATCTGACCAATGAAATAACAATTGTGTGTTCTCAAATTTACTTCTACAT
TTTTAAGGTAGTAAGTTTAATTAATAAATCTCTAATATAAATAATGGCTTATTCTCTAAAATTTAGAGGTAAGCTAAAGTT
TTCATCAAGGCCCCATTATTTAGCACTTTCCAAACTTGGGAAGGTCACTTAACTCCACTGAACCAGTAGAAATAAAATT
AGTGGTAACACTGAAAGCAAAAACAGAACCAAGTCCAATTGTCTTATTAATAATAGCCTAATTGTGTAAATGTCTGTTA
TAAATTTCTTAGCTGGTTCTGAGAGATAGCTAGTAAATGGCACCCCTAAGTTTTATATATCTGTTTACAAAACAAAAACA
AATAACAACAATAAGCTGTTTTCTTTGTCTGTACTCAAACATCTGGATTTCTATTGTAGCCCCCTAGCACATTGTTACC
TTTGGTTGGATGGACTGAAAAGTGTGTGATTTTTCTCCTATGTAGAATATTCAGAGGGAAAGTGCAGGGCAGTGCACA
ATGCATACAAACATTGACAGGATCACTTTCCCTCAAGCTGAACATACTCTAGGCCCTCCTCTCTCTCTAGTTACCACAG
TTGAACCCACTCAGCCCCCTACTTGCAGCCTCAGTCCCACCCAGGCTCACAGGCCAATTTTGTCTTGAATTAGGAATT
GAAAGATCTCAGGTAAGCCAGCCACAATGGAGACAAGATTTAGAGATAAGCAAACTGACTTGGACTCACATGCTCTGTC
ATATATTACCTCTGTGGTGTAGCCAAGTTCCCTTAACCTCTATGAGTCTCAGATTTCTCATCTATAAAGTGGTGATAAT
AATGTCTGCTCGTGAGTTGGAAGATTAAGTAACATGTAGATCTTATACCTGACACCAATTGTTTTCTCTGTGAAAGTTC
AAAATTTCTCTTATGATTTAATCTTCAAGGAAGGTGACCTGACCTTTTTTCATTCCTGTATTTACTTATATTCAGGCA
TGTATTGGTTAAGATATACATTTTGCAATTAAGAGGGACCTCAATTTTAACCTCAGATCTGCTACTCATTTGGCTGTATG
ATCATAGGGGCAAGTTACTTCAACTTCGTAAGTCTTCGTTTCCTCAGTGGTGATACAGAATAAAAAATAACACAAAGCAC
ACAGATAAATTATTATGAGGATAATATATAGTATACCCTAAAAATCTGTGCAGAGTCTTCAGAACACTTTTCATGTTAGT
TACCTTATTCAGTCTCTCAAAAGCTCTTTGCAATGGCTCTCTCTCAAAATGAGAACCAATGGATAAGACATTATAAAT
CAGCAAGGTCAATAAACACCACAGAATAAACACCAAAATAAGTGGTTGATATCATCATAGTAAAATGAGGAATTAGAAAA
GTTAACCCGACATTATGGTGATGTTTGGTTTCAAACTCATTCAGTGCACAGGAAGTGTCCAAGTAAGGAAGGGTCTG
AGGATGACAGGTACTCAGGAATGGGAAAGTTTATGACTGTTGGCTCCAACAAATGGATAACCAGATTTAGCAAGATATT
GAACAGTCACGGAATAATCCACAGCACCAAAATTTAGCACATGAGATTTTATTTAGGGATTCTTGGTATTGGGGGTC
TTTTTTCTTTCTCCCAAGGGAGTGATTTTGTCTCTCAGCCTAGCAATTTTCATCACTGCTTTTGTCTTATTTGTAAGCATA
ATTCTAAAAGTTGTAAGAAGCCATTCTGTCTTATTTGGTACGTGGCCAACAATAAGGGTAGCATGAGTTGGAGTCA
GTGTTGCAACTGGTTTCCCAATTAACAACCTGTCTCTAGGATCCCATAGTTTCAAAAAATAAGTAGAAACATTTCT
ATATTTAGGAGAAGCTTAGGGTTTGTAGCAATCGAGAAATCTATCACCTAATTTTGTAAAATTTCTTGCCACCTAAT
TTTTTTTAGATCTTGTAAACAAAGTTCTTAGAGGGTTTAAATGCTGCAAAATAAAACATTAAACATTTCTTCATATGATTA
ACCTTCAAGATATAACAGCTAATATTTTATTCTTACACACATGGGATATAAAGATTTCAAATAGAGAAAAGTGTATCT
ATCAAACTGAGGACTGATATTCTTTTTGAACTGATAAARTGGTATGCCTATTTACCATGCTCATGAAGTAACCAATT
GGCAATTTTGAAGCTTAAAGATGTTTCTAACAGTATAAAAAATAGTTTCTTACCTCTCCCAAAAGCTTACAAACATCA
GTAGTGTGTGCCTAAAATTTTGTCCAGTTTTCAGAAATGTTTATATAAATTGCTTATTCAGCCCTCTCCAAACTCT
TTGCAATGGCTCTCAAATGAGAACCAATGGGTAAGACACTGAAACTCAGCAAGGTGAGGCAACAATCTTCAAGGTCAC
ATGGCAAGTTTCAATGGCATACTGTGACTCTAATCTCTAATCCCTATACAGTGTCTGCCCTGAAAATTTGCCCAATGGTA
TTTTGATTAAAAAATAAATTAATCAATCAATAGGAAAAAGAACTAAATAAGCCCTACCTAAATTACCTGTTCTGAA
ATTTCTGCCCTATTTAGGCACATATAAGAATAAGTAAGTAAATGCTCCATCTTATTTTAAGATGCCCTGAAAATATTG
GTTTGTCCATTTATTAACAAACATAATTGTGGTTTTTATGTCTCTAGACTGTTTGTCTAAGCACTGTTACCCAGAGGG
AAAGCAGATGTTATCCATGTTCTCATAGTGTTAGGTCTATCAGGGGAGCCAGATACCAATAAGTCATTACTAATGTG
ATGACATTGACAAAGAGGAAGTACAAAGTGCAGTGGAGACCTCACCTGGTATGGGGAGGCAGGGAAAGACTTCCCGAGGA
AGTGAATTTCAAGATGTAATCCTATATCCACCCTCCTTCACTCACCAGTCAATAGCTAAGTAGGATTTTTATTTAAGA
CTGTATTCTAGTAGATAATTAATAAGAAAGATTTTATGACTTTTAAAATCTTCATATACAGAGAATTGAACAAGA
CAATCAGTGACACCAGAAGACTTTTACACACTTGTAGAAAATGTGTCAAATTATTTATTTCAAATGATTAGTCTACA
TTGATTTCAAGATTTTAAAGAATTTGAGTCTAGAAATATTTTGAATAGTTAGAAAAATCTCTTAGGAACTGTTCAG
TCATTTAGTAGATATTCAATAAACATAAAATTTATTTCTTTCTTCCATTTCTTCTCCTCATGATTTCTTTCTTCAA
TCCCATTTATCCAAGTAGGCTTTATCCAACAAAGCTTTAGAAGGAGCTTTGTAGTTTAGTGAATAGAAAAGCTTGACT
TAGTTGTTTTTCAAATTTGCTAAAAAAATCCTAAAATTAATGTAGATGGAAACCTTAAGTGTCTAGTAAAACATTTTGA
TTCACAATCATAGTCATATTGATTTTTTATCATTATATTTAAGCATGCCTCTTATTGATTGTTTTAGTCTATATCCTGA
TTTTAGCTCTTTAATTACAGTTTGTGTCTGTTTGTGTCTGGGTACATATATGAGTAATGGATGCAATTGTAGAAGCTTA
AAACACAGAGCATGCTTTCCAGTGTCTTAAAGACCATGGGGTACCTTCAATTCTGTTAATGTTTTACTGTTGCCAAGT
CTTAAAATAATTGTCTCCCATTTTCAAGACATGGAATAATTGACCTTTTCRATCAAGTAGACTCATATAAGGTTTAGAATG
AATATTTGAAAGCAATTCAAAGAAAATTTTGGTATTATTTTGAACACTTCCATTTTGAAGAAATACTTATAGTTGATT
TTGATAAGTAATGTAATAAAATCATTTTTTACATTTACTTGTACTGAATGGATATTAGTTTAAAGGAGTACACAAGCC
CCGTTATCAAAGTCCCTTTGTGCACACTCTTTTGAACATGYATCATTTCTGAAGATAGAATTACAACGACACCCCTCATCAG
AAGTAGATGGTAATAACAGCTGTGTTATTTGCTTCCCATTAACCTCTGCTGGCTTTGAGTCTGTGAACAGAGACTATT
TCAAAATACAGCACTATCTGAAACCCACTATCTGCCCTGCTCTGGTTTCTTGAAGCAATGCTTTTCAACCTAACGCAAC
CCCACTGATGTAAGTCTTATTTCTCTGAAGTTCAGCTCAACCCCTCGTCTCTTCCGTATGCCTGTTAACTAGAGACTTG

274/375

ATGCGCAAGTAATTGAATGCCTATGTGGATTACGTTTAACTTATCCCACTCTCAAATTTGGGAGTTTCATTTTATTCA
TAGTAGCTATCTCTATAAAGGAAATCTGAGTTTCTGTGTCAGACACCGAAACCCAAATTTGCCATTTGTAACATCTG
GAATCTTGGAAACCAAATCCAGAAATATTCAAGAGGCAAAAAMGATGCCTTATTTAGAGCTCTGCAGAACATAAGAGC
TAAGTTATTGGCAGGAGACGGGCACCTTGTCTGATACTTTAGTGGGGTTAGGACTTACATGGATAACAATTGGATTGGAG
CAATGTTTAGATTTCGAATCTGGTTTTCCCTAGGACATATAAAATTAGTGTGCACAACCTGTAAACATAATAATTTGT
CTCAGGGATGGAACATCTCTCCTTGCTATTGAATCATGCTTTTACTAAAATTCATCTGGAAAAATAAACGCTTAATAAA
TGACAGTAATTAGAATGTTCAAAGATGTCTTCTTTGTTCTTTTATACTCTTTGATACCCATGAAGTAAAAATTATAAA
CAGCTTGTGTATTATAAATGCTAGTAAAGATTTCATCTAGAAAATCATTTTATTTAATTTCTTATTTTTCCAAATGT
CTAAATTCATGTCCTGTGAAATATTAGCCAGTTCTTCAAACAATATTGATATTTCTATTTGAAATCAAGGCTTAAT
TTTGCTCATGATTAATCTCAGAAATAAGTAGCTTATTTCTATGACCTTACTGAGACCTGGTAACCTAAGAAGGATTATG
TGTAACGTGTGGGAAGAAATGAAAAGGAGGCGGTAAGTAATTATTTAAGAAAAATAATATTAATATTGACAGACACTT
CTTGTGTCTGTAACCTGATTTACACTAGGAAAATGAAGCAGAGTTTCAATTTTCTTGTTCATAATTTACATTTACAGT
TCCATTGTTTTATCTTGCTTAACTGTTCTAGATGACTGCCTTTACAAAGCAGGGGAAAAGAAGGAAGAAATGTTTTTG
ACAGTAATGAAAAGACAAGATTAGTTCTCCTTCTTGACATTTTGTAGAAAAGTTGGACATTCCCTAGCAGATTTCAT
TCTAGATTATTCTGATGTCCTTGTAGCTTATCAATTAGATATCCATTAAATTTGAATATCCCTTTAAAAAGGTAAATTT
GTAAGCAAAGGCAGTTAATTTATTTGTGAAAATGTATACGTCTGGCTTTAGCCTGAATACAAAGATAGGGTTTATCTTGC
TATCAGTAAAAATTGGGATAACAATGAAAATTTTTCTGCTTCCAAAGTCGTATACATAAACTGTAGCTTTTATTAGAA
ATCAGTGATGCTGTTTTCACCTACAAAAATTTAAACACCACCTGGACAAAATGAGAGCTTTGTGTTGCTTGGAGGGTGAAA
AAAGTCCATCTTTGCCAGCAACATCCCTTCTACTCTTCTGCTTGTCTTTGTGGCCTCCCTCCCTTCCCTTTCACACCA
AGCCACCTCACCCACCAGCTGTTAGGGACTCCTCCCTCTTTACGCAGATCACCAGTTATCTTACACTGTCTGGCTTT
AGTCTCAGATGAAGACATTCTAATAAGCACCAAGTTGTTTCAGCTCAGTGCTAACTCTGCCAGGAATGTGTGCATTTCT
AAGAGCTGCCGAAAATGGAAATTAATAGTTTGAAGAATTAATGATAATGGTGGCATTTTACATACCAGAAGGGCAG
ATTGGCATCAGTGTAAGCACCTTTTTCAGTCTTCTTTGAGAACCAGGAAAGTGGCTACCTGTTTTGCTCATGCGAAA
TTTGGATCTCTATACAAAAGCAAAAAGACAGTTTGTGAAGCGTTACAATATTGCAAGTTGATTACAGRGAGAATGTGTTG
TGTTTATTTTGAACCTCTCTGCTCCTCCAAGGTTGCTGCTGTTTCAGGGCAGTTCTCACTCACCCACTTTCTTTGAGCTC
ATGCTCGATAAGAAAGAGGTGAAACCTGTAAAAACCTTTTCTATTACTCGTCTCCAAAGCTGATATGAAACCTGTAGCAT
TCTTAAGAACCCTTGGTGTCTTGGATGCTGTTGTGAAAACAAGCATAATGTTTAATGTCTTGAGCTTTTATTGAAATTA
TATGAATATTCAAGACTCCCTTGGTGTACAAAGAGACAGATTGAGCTTTAGAGGTCCTCAAATTTGCAGATATGGTGATG
TTCCTGAGCTCAACTCTTGGTCAATTTTGTCCAGTTTCAGAGAGGGTTAAATTCCTCTTGGGCACCTTGAAGCCTCTCT
AATCTTATCCTGAAGAAGTGGCGCTCTCCCTTGGTTTACAGTTGAGGTCAACCGCGGGGCAGTGTGTTGGATACAGACTG
ATGAAATTATGCTGCATTGTTAACATTGAATACCACTCAGTGGTGAGGACCGATGACGGCACTAGGGTCTTTGACTCC
TTGGGTACAATTTCTTGAAATAGATGCTTTCCCAAATGTCTTGACTCATAAAATATATGAAGGATTTCTATTTGGCTT
TCATCATTTATTTAATTTGAAAGAAAGTTGTTTTAACAGATTTATCAGAGTTAAGAAATGTTTCTAGGGAATAGAAAAT
GGACAAGATAAATTGATCTTTGTTGTCAGAGTCATGTAATTCATCTCTAAGGTGACGCAGCATCTCCTTGAGGG
CAAAGCTGCCAAAAGTTCTGAAAAGTGATCTGCTGTTTTTTTTTCTCACACTGACTTTTGTAGAGAGGCGCTGGTATTTTC
AAGACGAGTAAATCCTGTTTACATCCTGTGGAAGGTTGGCTAAGAATTATATCCATCTCTTTTTAAGAGAAGTTGAAAT
AAGGAAAATTATAGTTGGCAGTTAGCTGTGTGAAAATTTAGTAATCTTTGTGATGASCCAGTCAAGGCATGTATTTT
TTAAAATTTTTTAAACGAAGCCCTGTGGGTTTACATTTTTTAAAGTTTCACACTGATATAAAGGTTTACCCACTTCAATCA
CACCTTTTGTGTGTGTGTCATGCGTGTGTGTGTGTGTTGTGCTTTTTCAGGAGTGGCATGTGACTATGCTGTTTAAATCAGGG
CTATATTTAAAAACAAATTTTTCGAGGGAGTGTCTTTCACGTTAATTATGAGATAAGGCCTGAGTGAAGCAAACCTCTGTC
GCAAAGGCCAAGTGTCTATGCAGCAGGAAGTCTTGCCATCCCTTCCAGCCCTGCTCAGCCAGCCTGCCATCTCTCTGT
CAGCGCATACCACTGCACAAAGGAAATGCCCTCACTCAGCTACAAGTGCCCTCTGCTCCGTGCGGGGCCCTCAGGGCCCC
AGAGCCCCGACACAGCTCTGACTTCTCGTGGTTCTTGGGATCTTGGCATCGTCTTAAAAATGGCTTTTGTGTTGGGAT
CCTCTGGGAGCCACGGTGCCAGGACCATCTACAAGAGCCAAATCAAGATTGCGTTTCTCAAAGTCTACAGGTATTACT
CTTTTCTTTTGTAGCTAGGAAGAATTGTTTAACTGCCTTAGGCCCCCTGCAAATAAGCCTTTGCCCTATGTTGACCTT
CTAACTCCTAATGCTTGTAAATTGACAATATATTAATAAGAGCCAAAGAAGATGATGTAAACCTTGAAATAGGGGTAT
GTAGGTACGTGCAGAAGTTGAAGGAAGTTGACTAACTTTAAAGCTAATTTCTGAGAGTTAAATGGCAAACCTTAACAAAG
CATTATATTAATGCTGCAACCTGAAAAACAGTGTATTAACCTTGTCTAATGGCTTAATACAGTCAACTCTAAATGTTAGGGA
AGGGTTCTTGTGTTGACCAACAAAAAACAACACTACATTATTCTTCATAAGTGTGTTTTCAGGGCACATGCACATGAAAAATG
GAACTAATGCTGTTTTCAGGTAGTAATTCAGTGTTCATCTTGGCCAGCMGAATTACATGTGATGAATTCAACTAAATA
TTTAAATAATCTTTTGTGTTTCTGGAAGTCATATTAATAATCTTGACCTCATGACTTCACTAACTGTCAATGACTGTTTT
ACAACAAAATCAGCTTATTTTAAACAAATAACTGGAAAGAAAGAAACACTTAAAAAATATTGGATTTCCTTCTTCATT
TGAGTATTCTAGGTGTTTAAAGGAAGTATCTAATTAATCAATAGTAAATAGAAAGTGACATTGTTTGCAAAATTTTGA
TTGATTACAATCTATAGCACTGAAAGGTATCTAATTAATCAATAGTAAATAGAAAGTGACATTGTTTGCAAAATTTTGA
TATAAGGTCTTTCTTATTTAGACCAAATGCAGACACTCTGGAAGCTGCCAAGCCTATGTAGAAATATATTAACACTG
AATTAATAATGTGTTCTGATTTGCCTGCATATAAAACATTCAAAGTTTGAATTAATAAATTTAAGGATTAAATTTATTT
GCTTTAGACACTAAAGAAGATAATGTCCTTGAATTTTTAGGGAATATAAAATCAGAGAAATCAAATTTTAAAAATTTT
GTATAACAATGCATAAGCAAACCTTTGGCAAGAGGTAAATATAATTTGCCAGCTAAAGGTATAGGTATTAACCTCAATTA
TTTTTATTTCAAATAAAATAATGATTTATTTGTTATGTTTGTACAGCTATAAAATTTAGTTGAAAATTTTAAATTAT
ATGCTTCTATGTGCTTTGCATTTTGTAAATGTGATTCTCATGCTTATTGTATGCTAAATGTACATTTAGAACTTAA

275/375

CATCAATGATTTGCTAACATTACTGTGCATATTTCCAACATATGGTGGCTTCTAGGCTCTCTTCATCACTAGATCTGAT
 AACAGCTCCTTAATATCATAAATCTCCAGCTGCTGAATAAAGTAAAAGCAATAGCTTGATTGACTAATGAATTTGAGA
 AATCTCACGAAATGCAGAGTTTAAAGCTCTTCTGTGTAGTTTGCAAATATATTATAAACCTTGCCTTCTCAATTTGGCAA
 AGATATTTTTTATTTTGAGGTGTTATGGTATTGTAACAATTTAAAGCTATATGATAAATATATTTTTTCAAGGTTCCCTTT
 GGTCAAGTTCTGACCCTTTCCAAAATATAAGCATTAGCAGCTAAGAATGACTTTTTTCATGTAYTTGAATACCTCACATC
 TGTAATTTTAAACAAGTTTCATTTGTAAACAAGTTTAAAGAGGTGAGAATGACATCTCAAATATCCATCATGAGTCAGTTTC
 CTTGGAAGCTTGAGAGGCTCAGTCCTTCCCTTTACTTCTCTTAATTTGAATATACARTTTCCACAGAAATAATTAATT
 TTTTATATGTGCTGCTTTCACTGTTTGGAGGTTCTAGTTTATCTTTCCAGTTGCACTGCAAACTCTTTGAGGTTAGAA
 GTTTCCTTACATACAGCAAAAATGCCAGTAATGCCTATTTGATAAAGTATTCTGTTACCCTTTCTTATTTGGCATCACC
 CGATAATGTTTTATTGGCATAGCCAACTTGATATGATCATATCTATCATAAGTTGAATTGAGTGGAAAGGTTAGGGAGG
 TAGGAAGGCAGTTGGCCACTGGCTCTTGCATTTCTGCAGGTCCCTCATGTATCCAAAGGAGATTACGCATTACGCCACG
 ACAATGTACTGACAATAATGAAAAAAGGTACATATCATATAACTTAAAAATTTTTATCATACCATAATACTTCAAATGCA
 CCATGAGTCACTCTATATATATACAGACACATATACACACCACACACAGGCACATGCACGCACAGTTAAATGCTATAAT
 TATCTTCTGAAGAGCATAGTTTATTGCATAGCATTCTTGAATTAAGGTGTTAAACTATTTGATGTAAACATGTAA
 ATATCTCATAATGTCACAGCCTTGTTTTGCATTTCTTATTTTTTAAAAAATATACAAAATCCTTACGCGGTGAAAGTA
 ACTTAAGCTTATCTTGACCTTTAAGAGGCTTTGGATCTGATTCCATTATGAAGCAACTGAAAGAACTGGACATTGGAC
 AACATTTCTTCATTGAATTTCTCCCTTATAATTTTTTTATGAGCAATATTTTTTATCTTGTAAAATCTTCAAATGTGC
 CTATTGTAGTGTCAATTTTTCTTTGGCTATTGAATGGATAATAATGCATGCTACTGGGGGTACACTTAGCTTTAACTGGA
 ATATTTTTCTTGGCATGGCTTTTGCTGCCTGGTAATATTAGGCTAAAGGAAAGCCAGGTGTACAAGATATGAAATTC
 AATTAGTGTCTGATTTGTTAAAGTAATAGCAAATCATATACATTTAATGAGTGTGACTCTTGAGAAAATACAATCTGAA
 ACAGTTTTACAATGCTCAAAATAGATGTGAAAGTTTTTTCAGCTGTGACAATTTTTTATCTTATGTGGGTAAAAATACATT
 TTTATAAGAAAAGATTAATATATAGCTTATTAAGTTTGATTGAGGCAGAAAGAAGGATTGAAAGAGAAAAGAGAGGGA
 GAGGGAAGGAAAGGCAGGGGAGAGGAGGGGAGCAGGGCCGTGGAAGGAGGAGTGAGGAAGAGAAAAAGAGAGAAAGCAG
 AGGTTTACATAATAAGGAAGGTACTTTTCTCTGTGAGCCCAAGAGATTGCCAACCATGTTTTTCAGTAATGGGATCA
 GTGTTAGCATTAGGGCACCCTTACAAAGATGAGTACTAATTTTGGAGGCAAGGTGCTGATTATCTGCCTAGGTTCTG
 GCACACATGTTTAAAGATTACCTAATTACTTTAGAGCAACGCCCTCCCAAGTATTATAGAGAAGAAAGAGGAGAATG
 ATGTGCTCAAGAAAACAATGTGGAGAAGTTTATATTGGTTGTTTAAACATAGTACCTAAAAAAGAGGAGGAAATG
 ACGATCTGGGAAGTAAAGAAAGAATCAAGGAGCAAAGATTTAGCAAGCCTGTGGACCCTGCAACTCCAATAAGAGAAC
 ACTAGGGAATTTTGTGATTTAAAAATATATTATTGCTTAAACTACAGTAGTGTTCAGGAACTTTAAATAGAAAAATTA
 CTCTTCTTGAGATGATTCTGTCTTCCAAAGAGAACAAATCACAAGGATGTTAAAGGAACATTTTATGTGACAAGTTTG
 GGGTAGGTACTATGTAAATAGAAGAGAAAGTCACTCAAGGTACATTTGAATGTAGGGCAGAGATTATCCATAGCATTTC
 CACAGGCCAGAAACAGAAAGTGTCTTCTAGTTTTCTTGCCCTTTATAGTAATAGGGGTGATGGGATAGAAATTTCTCAGA
 AAATCTCCAAATCTCATTTTTTGCCAATTGTTTCAACATCTTTTCTTCCAGCATTTTAGCAGAGCTGCCAAACAGGTG
 ATTAATTAATACATATGTGCATGCTTGTACCTCGTGTAGAAGGTCTAATGAGTAAATTTATTTGATATGACATAGACT
 GAACAGTAGAAGGAAGGATTAATGACAGTCAGATCAACAAACAAAAGTACAAATGGTATCTGGGCTATGAAAAGATAAA
 GCAATATTTGCCCAAACAAGAAGATCTAGATATCCCTAAATTACCTCCTATATTATTAGGAAGTAAAGACCAAATCTAC
 AACTTTGATCTGGAAATTGTATAGTAGCTGATATGAACAGGGATCATAGGAGAGTGTGGTCTCATAGCTACTCTTTGCT
 ACTACCAAAACCTGAGTGGTAGCACATCAGTGATTGCCCAACCAAACCTGCACAATTCCCATTAGAAAAGCTGTCTCAA
 ACCCATCTTTAGAAAGGAAGTGAATGCCACCAGTGAATCAATACACTGGGATGTAACCTTTCTGCATACCCCAAGAATA
 CCTCCTGTGTCATAGCACTTTTATGTTTTCAAGCTTTTTCAGATGTAACAGATGTGACAGCTGTTGTTTTTAGTGTGCC
 ACAGCTCATCTCACTTAATTTCTTTAGGGTAAAGTGAAGAGTGAATGATGATCAATTAAGAGAAAGAAAGAAATTGA
 AGGTTTCAAGGACTAGAGACCACACATATATGTGGTTAGAAAGTCCAAAGTAAGAACAGTAGAGTAGTTTGTATTGGAC
 ACTTACTATGCACCAGGAACCATTCCCAATCCCATACATGCATTAGCTCATGCATGTCATCTCCCAAAACAGGCTCGGG
 AGGTGGATCTAGCATTTACCTTTATCTTACAAATGAGGAAACCAGGCAGAGCAAGTTTAAAGAACTGCACAGGTGTGAA
 TTCTGGAAGTCTGTGTTAGAACCAGGACTCCTGGTCCCTCTCCACCTCCAGCTTCCCTACCAGATCCTATTATCAGCA
 CACAAGGAAAAAATTCATAATGAGAGGTATTGTTCTAACAGATGTACTATCTTCTCTACTTAACTCTGAATTTTTTC
 TCTGAAGACAGAACACCACGTAATTTGTTATAGAATAGGGCTTAGTAATCAGTTAAATATAAACTTGTAAATAATAT
 CTAACTGTCTCTAACCTAATTGATGTTGGTTTAAAGAAATGCTAAGCAAAAGCATCAAATAGAGGTATTTTTATAT
 TAAAAAGAAGAAAAGGAAAATGAATCCGTTATTTTATATTGTCTGCTTCTGCCCCCTCCTGGCTTTTGCTTCATGGGC
 TTCCATCTGGCTCATTTTCATCTGGCCAAAACATTGGTTCATGTGGTTGTATTTTACTGCCAAATATTACTCCTTGCCA
 GCTGTTTCAGAGGAGCCAGAAGATTCTCTGAGCTMGAGAGGTCAACTCCATCCTGTGTCTATTTTATTCTACTGGC
 ATAGTCTTGACTATTAACTAGGTTTCTTAATGATATTTCAAATTTGTGAGTAATGTTGGCTAAATTGACAAAAGAAAT
 TATAGACAACATTTATATCTAAGAATAACAATACTACTAACAACCATTGCACATTGTAGGAAGAGGTAGCATGGTATAG
 GAGGAGAACTTTGGCTCTAGAGCCAAACAGACCCAGCTTCAGTGCCAACTCTGCTGCTTTCTTGATTGGGCAGGTTTCC
 TAACCTCTCTGAGCCATTTCCATGTACATAAATAGAAAATTTAAATATCTACTTCATAAGGTCGTTGTGCAGATTAGAT
 GAAAGCATGTACGTGAATGCAGGACTACCTGCCAATCTTTTCATAGCATTTTCCAAGTCTTCACTAACATTTTCAAAAT
 TTTGTGAAGCTTCTTTTGTGAATACATTTTCAGATAAACTATCATCATTTGGTACCCTCTTGGTCACAGAATAGTACA
 ATAGAGCTGGCTTATAAATGGTTACCTTATAAGCAACTTGCACATACAACCCAGGCTCACCTTGGAATGTAGTGTGCA
 GGAATGATTGACAGCTGGCTAGCTCTACAGCCACACTGCTGCTGAGGTTACATTTTACATTATCACTTATAGCTATG
 AGACTTTGGGCAAGTTACTTCATGTGCCTCAGTTTCTCATTTGTAAAATGGAGTATTATGAGGATTAAGTGTGTTAGC

276/375

CATGTAAAGTGCCTGGCACATAGACAACACTAAAATAAATGTGAGCTATTATTAATAATAGAATGTAAGCTCCACATGG
CAGCAATTTTTGTCCCTTTTTCCACCTTTGTATGGCCAGTGCCTGGAAGAGTGTGTGGTACATATTAGGTGCTTGGCGT
TTGTGTATTGAATGAATGAACCTATTAGCAAATGTGTTCCGATTTCATGGCAAGTGTGAGGATACTCTGCTTCTTTTGC
CACATTCATGGGAAGAGGGGGTTAGAGCTGAAGGAACCTGATGGTTCATTTGTTCAAACCTCATTTGTCTTACATTGAAG
AGCTTGAAGACCTTGAAAGGCCCCAGGGTCATGCAACTTGATAGCGGCCTGGTCAGAGCTAGAACCCTGGCTCTGTGTG
CTTCTGTGAAAATCTTTGTTCCAATGTCCCACCCCTCACTTCAATACATATGCCATCTAATTCARTGCTTTTCAGTAAGG
CAGCAAAATGAATGAATGATTTCAGAGCACACTTCTTGCAGACAGGAGAGTGTATAAGAGCCATAATTGGGCAATGACCA
TGGAAGGACAGGTTTCTGAATAAGAGAAAAGACTTATCCAAGTAAAATTATGTTTCAGACATTTTACTTACAAGTCTAAAA
ATCACTTGCTACAACAGCTACAATAGGGTTTTTGTAAGGAAGTACCCTTTGTAAACAACATTTTTGTAGAAATGCATTA
TATGCATTTTTTTCAAAATTGAAGGAAAGCCCCATCTCAAACATTCAAAGAATCYGCTCAATTATCAATGTAGACTAG
AAACAGAGATAGAGAGGGGAGATACAGTTTGAGTGTTCCTGTATTATCATGACAGCACATGGAACAACACAGGCAGA
AAGATTACAAACTCTGCAATAAATATAAAGGTATTGGTTTTATAAGGTGGCCTGCAGGCTACGGACCAGCACAGAGCTC
TGGCAAATGTGGAATGCCAGGAGATGTACAAAAAATCAAGGTGACAAAAGAAGAAAAGACACTCCAAACTGCCAAGGG
TTTATAATCATGCTGTGGATATTTCTGATCATCAGTGTGTTAATGGTTTTCACTATAGTTAAACTATAACCATTTTTGA
ATGGGTAATAGGTATGAATATTTATGCTTAATTAGTAGTTTATAAAATTTATACTATTTATTTTCATAATGTTGATTTT
ATGATTTTCAACGAGTGGCATTGTCTTAAAGTCATGAAGTGGATGAGCCCCATCAAGTGATTTTAAGAGACAGTACC
TTGACTGAGCAGCTGGATCAAAGCCTGTCTGATCTGGGCAGAGCAAAATAAGGAATACTTCTTACAAAAGAGGAAGCATT
CAATTCTATACACTTTTACCTTTGGTACTCCTTGTCTGGAGGCCTCAGCTTCTATCATGTTCTTTGCCACAGTCATATAC
CCACCTTCTACCTTGGCTCTCCCTCCTCCTAACCTTCATTATTTTTTCTACTTTCAAACATAAATTGACAAGCCTTTTT
AATTTCAACAAGGGTCTGAAGAGAGGTGTCTGATTTTCCGTAAGGCTGGGTTATATAAGCACACAGAGTTGAATCAGAG
CAAAGGAAAAATCCATTGGCAAAGGAAGAATACTATATGCTACTTTAAACCTGTCTGAATGTATTATTTTATTTACTT
ATTTTAGAGGCAGGTCTCACTCTGTCTATCTAGGCTGGAGTACAGTGGCATGATCATCACTATTGCAGCCTCAAACCTC
TAGGCTCAAGGGATCCTCCAGCCACAGCCTCCTGGGTAGCTAGGACTACAGGTGCACCCTACCATTCTGGCTTAAAAA
ATATATATTTTAGAGTCTGTTTTGCCCGGGTTTGTCTCAAATACTTGGCCTCAAGTTATCTCCACCTCAGCCTCCTA
AAGTGCTGGGATTACAGGCATGAGCCATGGCACATGGCTCAAATTATATAATTCATTAGCTGGTAATAGTGTAATTTG
GAAGAGAAAAACTAAAATGATAAAGAGGAAAGATGGATTGTGAATAGAGTAAATATATATTACTGTAATTATGTTAAGC
CAATCAAATGCAAAGGACAGTTCAAAGGGGACAAGTATGTAAGCCACATTCCAAAAAAGCCTTTGAAGTGA
AGCTTTAAAAAGATAAGCTTTGTGTTGAGCTAAAGAAATAAATCTTATAAAAAACAAACCTTAAATTTGTTATGACAAT
GAATTAACATTCAAATGAACAGAACAGAAATGTAAAGATTATTCCTTCAGGTGGTAAATGTTTACAACCAGCTCTC
TATGGGGGAGGGGAAGGGCACTATTTGTAGTATTTGCTGATTTCTGTGCCAAAAATTCCTCACCTGCCCATTTCAA
CAGCAGAGGTCACTAAATGTGGAGTTGGCAAGAGATACATAGACATAGTACTCTATACAGTGTTCCTATCATATAGATA
CAGTAGATATAAGTTGCCCCAAAAACATAATAATACAAAATGTAGCCAAATCATTGAGAAGTTATGAGTTTGAATACT
TATTTCCATTGTTTTTAATATAATTTGTTTAAATTATAGTTAAAAATTTTATGTAATTTAATTTTAACTGTTGGG
TATTAACAAGTGACTTATAAATACTCTAAAAATGTAACAGAATGTAGTGAGGGACAAAATGGATGCGGTCTCTGCTTT
CATCAAGTTTACATTTCTGGTAGAGAAAGACAGAAAATAAACAGTTAACAATAAATAAATAAATAGAGACTGAGATGA
GAGGTTCTGCTTGGGGAAGCCAGGGAAACCTTTACAAAAGAAATTTGATAATTTTATTTGCATATAAGTTCAAGCATATCCA
TTCCATACATCTGTGAGTACATTTGTAGTTCTAGGCTGAAACTCAGAACTGCACAAGGTCAATGGAACCATATAAATA
TTGACCTCATTACTGACTTGTTCCTCAGTCTCCAGTCTCTTGAGTGAATTTACCTTTGCTTCTTTGTTATTATAAAAAATA
CAGTGAGGGAAAGTAAAAACAAGGAGGAAGATGAAAAGAGATGTAGGGGGAAGAGGAGCAGTTTACAATATACTTTCTA
TTACATTGTTTCACTATCTCAAACCTTTTATACGTAGAAAATACTAAAGCAAAAGAAAAATGGAAGTTAAAAATCGG
TAGCAGTAGTAATAGTCTATAGTAGGAACCTTGTTCCTGTTGAAATATGTGTCTGTGCTGCTACAAAACATAAACA
CCTTAAGCTAAGAATAACTGTGAGATTAATTTTATTTTCAAAGAAATAATACAAATTTTAAATCTTGCATTAAAGG
AAAGCTAGCTGGACGAACTTTTCTGACACACAGATTTTGAGAATAGCACCATAAATATGCTTCCAATGCTTGTCACT
TGATCCCTTTTTGGCAATTAACCTTGCTTTAATTGATTGTGGATTACCACTGGAAGTTGCTATGGATAAAGGAATGT
AATGGCAGAGTTTGTATTATATAGGGTAACAAAATAGACTGGCTGGGAGGAGGGATTAACTGCAAAATATCCTTGATTT
TCAGGAATTTTTCTTTTACATAATGGCAGTGTTTAGATAAAGAATGGAAGTTAATGAATCAGATTTGTGTTCCCATC
CAAAGGGAAGATTTATGTCCTGTTTAAAGATCATTAAATTTGATGACGTTAGTACATTTCTCTAGTGAAAGAGTGGCCA
CTTTAGTGGAGGAAAAAACAAGCAACAAACCTCTTCTGCCATCTTCAGGTTGTACCTGACGAAAAGCTTTTATTTGT
GGGTTCTATGAAGTATCACTGCCCTGATCTCAGATGAACTAAAAGATGAAAACATTTTCATCGCTCAAATAATTGTTTAT
CTCACATCTTACTGGTTCTAGAAAAGGACTATATATTTTCCCTCCTAACTTTCTCAGTTTCTTGGTATAAAGTTCAAA
ATGCTTTGAGTAGAGTTGTTTTCAGGAGGTCTCAGTGGCACTGCCACTCACTGGTTGGGACGTTTTTGTCTCTGTCTC
CTGTGTGGAAGATGACAGGACGGCTTTGTGCAACTCTGTGTTATGCGCTGCTTTTCAACCCCTTGGATGAGATACTC
ATACAAGGAACGTGAGTTTCTTAAAGCAAAATCCGTGTAAGCTGAGACAACATAAACCCTTAGGGAGATCTGACAC
ACCAAAATGCCAAGAAAGGGAAGAAAGAAATTTATTCGGTGGGGGAAACAAATTTATCTGTATTTGGAGTGAATTA
AAAGGCTTATTGTTTGTTTTAGCACTACATGACTTAAAAAAGAGTCTCGCAGTCTGCTTCTCCTCATGTTGGTTAAA
ATGGAAAGGATTCTCTTTCTTTGCTATTTATAGATAACCCCTTAGCACTCTGCAAGGATCTATTTGGTATAAATGATGG
GTGTGAATGTGCCAGTAAGAGAGAAAAAATGCTTAGCCATATTTACTCATATAACCAACATCTAGGTCAAAATCAAAA
TATTACCAGCTCCCAAGGGACCCCTTTATTCTTCTTCCAGTCACTATGCACCCGAAGATAACCACTAACTGACTTCC
AATAGCATAGATTTGACTACTTTTGAATTTTATATGAATGAAATTATACAATATAAACTCTTATTTTATTTTCAAGTCAAT
ATTGTGTTTATGGGATTCATTATAGTGTGTTTGTGCACTTTTATTCTCATTTTGTAGTATTGCACCAATGAATATG

Fig. 6.27

277/375

CTACAATTTACTTATTTCTAGTGTGATGGATAGTTAAGTATTCAGTTTTAGGCCATTATGAATTAGAGCCATTATGAA
CATTATTGGATATATCACTTAGTAAACAAATGTACATGTAGTGTTCAGTGTTCCTGTCATACACGTAGGTTGGGTATA
TCCCAAGAGGTAGGATTTCTGGGTCAATAGTTATGCCCTTGTCTTTAGATATTGCCAAATGTGTTTCTATACTGGTTGC
CACATTTATAATCGCCCCCAAAGTGATGTTTCAGTTCTCTGCATCTTACCAAAGTATAGGTCATCCATTTTCAGTGATG
GCATCTTAAAAAATGTTTGCCCTGTAATAACAATGTCTCATCGCCTTTTATTTATGTCAGTTGAGTCTTTAATCTTTAGG
ACCTGTTTTTCCAGGAATAGTGTGGGTAACAGTGAGCCATTACACTCTGTCTGTTTCTCCTCATGTAATACTATGT
AACTGTGAATTAAGTGACTAAAAATAAGAAACGATCTGATATGCAGAAATAGAGTTTTCCCTGTTTGATCCATATGCAGC
TTAAATATGTGATGTTATTTCTACATTTTATCCAGATTCATTTTTCAAACCAATAGTAATCATTGTTAGCAAAAACCAAT
AAATAATCTTTTATTCTGTTTTAAAAATTTCEATGTCGTACTTTGAGTTCCTTGCTATATATCCCGTGTCTCACTTTAAATC
AGGTTTTCTTCCCGTACATTATTTCTTGGAATAATGTTTTGGACTTTTCTTAAACCACTTAAACCTGTTGAAAAACA
CTAGTAAATGCATAGGCAGTGTAAGTCACGCTAAAATAAATGTGTATTGCTTTTTCAAGATTTTGTTTACCCATGCATT
TAAAGAAGGTTTTTTTCCCTTTATTTTCTTTCTTTTTTGTTCATTATAGTCATTATGTCTTTTTAATGTTAAGATTCCGG
TAATATATATCTCTCATTTTTATGTCATCTCCAAAGCTCCCCATAACTGATTGATGATATCAATCCGGCTTCTGGCATA
TAAAGTTTGTGACCTGGTTCAGTTTGTACCATGTCAAAATGTGATCATTAATTATTAGATGATGTCAGGAAAAATTTA
GTATGTGTGATAACTGTGGGTCCCATTCTTAAAGCTTTCAAAATCCAATCTTAAGGCTCTCTACTTTGTGGCATATGA
GGGAACATAAGTAAACATTAGAGCAATATCAAACTGATTTCTAAGGGTTTTCATGATGTGAAACAATATATCACTTTATTA
CCAGACAGATACTTCACATCGTGAAATTTGAAAAAGCATACGAGGTGGGGCACAGTGGTTTTACCCCTATAATCCTAGTGC
TTTGGGAGGGTGAGGTGGGAGGATCGCCTGAGTCCAAGAGTTTTGACACCAGCCTGTGCTACAGAGTGAGACCCCATTTT
TACAAAAAATTTAAAAATTAGTAGGGTGTGATGGTGCCTGCCTGTAGTCTCAGCTACTCTGGGGGCTGAGGGAGGATTG
CTTGAGCCTGGGAGGTCAAGGCTGCAGTGAATGTGATCACAGGAGTGTACTCCAGCCTGGGCAACAGAGTGAGACCTCA
TCTCTGAAAAAAGAAAAAGTATGTAATTTTACGTAAGAGTCACTCGATTTCATATCATGAAGCTTGTGCTAAAAATGG
AATCATTCAAGTATCATGGGCTGCTTTTCAAGCATTTTTCGCTCACCCCTTTACCATTATGACAGTAACTTTGGGGAAA
GGGGAAGGCATGGGCCAATACATCTTTAGTATTTCTGGTTTACTAAGAACTACTGAGGAAGTGTAAAGGAACAACCT
ACATAGATAAAAAAGTATTTTATTATAACCCCTGTGAAAAACCTCTTCCCCATAAAACGTTTAGTATCTTGTATGAAG
GCATAATGTACTTTTAAATATTTCAAATCCAATTTCCAGATTTTCATTATGTGCTATGTACTGTGAATCCACCACGC
ATGTAATTTCTTGCTTTTAAATATAAATTTTCATTATTATCATAAATGAAGTCTCAGACCACAACATTTTGTAGGTTGC
ATTCAAATGGTAATCATAATATGACCTATACCAGTTTTTGCATGGAAGGGCAGCAGCCGGCTGAAGTAGATTTTCCACTT
TTGTCTTGGCTCATTAAACAACAATGGACAAGTTACCTTAACTTCATGGGTCTCAACCTTCTCATTTCGAAATTTGAGTG
TATGGACTGTATATTACAATATCCTTTAAGCTTACAGAAATAACATTATGGAGGTATGAGAAAAATTGTAATGATCCA
AGATATGTGCCTAAATATTTCTTCATACATCAAGCATGCATTTCATGAAATCAACACCAAGCCAGGAAATATCAAAGAA
TAGCTCAATGTCCCTGTGAACCTATATCCAATTCATAATTCATCCAACAAATGTATATTGAGTATATAATCTGCTAGA
CTTATGAAGCCTTAAACTTTATGCTGTACATTCTGATATATGTTGTTTAAACCAGGGGTGGTCAGCTTTCAAAGTGA
CCCTTTTGTCTAACATTGTTCTTCTGGCTGAAAGCTAGTAAGTATAAGCAAAAGGAGAGATGTATATGATCTCACTTCTA
TGTGGAATCTAAAAAAGTCAAACTCACAGAGGCAGATAATAGAAGGGGGTTACCAGGGGGTGATGGGAACAGGAGGGAT
TGGGGAAATGGTGGTCAGAGGATATAAAATTTTCAAGTTAGACAAGAGGAATAAGTTCAAGAGATCTACTGTACAACATGG
TGACTATCATTAAAGAACATGTATTGTAAACCAATATTATATGTGGTCACTTATAAGTGTGACCTAAATAATGAGACC
ACATGGATACATAGGGGGGAACAACAGACACAGGAGCATAACCAGAGAGGGGAGGGTGGGAGAAGGGAGAGAATCAGGAA
AAATAACTAATGGATACTAGGCTTAATACCCCATGACACGAATTTACCATTGTAAACAACTGCACATATATCCCTGA
ACTTTAAATAATAACAAACCAAAAAAAGAAAAATTTCTAAGAGAGTAGATTTTAAATGTTCTCACCACAAAAA
GTATGTGAGTTAATAGTTAATTAGCTTTAGCTTTCCGTAATGTGTACGTATTTTCAAGACATCATCTTGC
GCACTATAAATGTATGCAATGTTTGTGAGTTAAATATTTTAAATGCAATTTTGAAGAGAGGAGGGGTGTGAAATGA
AGACTACTTCTGACTTTATATTTTATATTCTGGGGTTACAAGAATGAGACCTCCCTGATGCCTACACACAATGGATTA
ATGTGAAACTGAAGGTTTACTTGCCAGTTTACTTGCCCATGTTTACTTGCCAGTTGATTGAGCTGGTTTATGTATAA
TTGTCAACAATTTAACTCTGTCCCATTTCTCCCAAAATTTATGTACTTTAAAAATAGATCTCATCATTTCAACATTT
CAATTTATATATGAGAGAAATAAAAAGGACTAGTAAAAATATATGAAGAAGCAACTCAAATATGGTAATTTATGGTT
CAAAGGAGATAGGTAATTTGCTTCTCTCAAGAGCCACTAGACCACAAATATCAACATCAAAGATGAATGCAAGCGCTA
GGGGAACGATACAGATCAGAGGCACCATGTGTTGTGCATTCTGGTATTTGTGAGAGATAAGGAATGAAGCTGAATTTT
TTCATGGATTTGTCTTGAAGGAAATAAAATGAGAGGTTATGCTAAGTATAAACTATCTTTACAAAGTTCTTTCCGT
TAAGACCTTCAAAGATATGTAAATCATAATTTGAGAATTGCTTTTAAAGGACCTAATTGAGTTAGCTAACAAATCATT
ATCTAAAAAGAGAGTGTAGAATACTATGCATTTAAAGTGAGTAGTTCACTTCATGATTGAGCAGAAATTCCTGAGTTC
AAATCATGGCTCTTCCACTTGCAGCTTATGATGATTTTATGAAATTCCTTAAGTGTGCTCTGTTTTAGGTGCTCTGCG
CCTACATCATTAGAGTTATTCAAGTATTAAATGAGATAATACATATATAGCCGTTAACTAGCGCCTGGCATAGAGTAA
ACAGTCAGCTCACATCAGCTAGCGTTATTCAAGAATAGGCTATACATTTCTTTCCATCAAAGATAAGTGCAAGTTTG
AATAGAAAAATTAATTTATGAAACAAGACTGATTTTATGCTTTTCTATAGTGCCCATGATTCAAAGGAAAAGAAGGAAA
TAATCACCACCAAGTGACCCTGTAAATAGATAGGAGTTACGCCATGCATACATACATACCTTTGCCAAGAAAATTGGATGTCT
CATATCTAAAAAATTTTCAAGTGTAAAGAACTAGCAGGTCAAGTACACAATTTGTATTCAACATATATTTACAGAAT
TTAATCTTGTAAAAAATTTCAATCACTGTTATTGCTTTTCTACTTGTAAACAATTTACAAAAATCCCTTGGCTTTTGT
GGTGTGGACTATTATAAGGGACTCTGATGCTTCATGACAGGGAGTAATTTGATCCAAAGTACAACGGAGCTSTCGTGTG
GATTTAAGTTACCAAACTATTGAAGGGACCCATGCACCACCAAGTATTCAAATCACAATATAATTTTATTATTCTCTAC

278/375

CTCCCTTGCAAAATGTAATAACTCTGAACCTGATAAAACACATTGTACCTGTGTAGAAAAATGCCACCAGAAAGGAAGCTG
ACTGCTAATCTAGGCCTGTGCTGTCCAACAAGAGAGCTAGTAGCCATAGAGCACTTGAGCTGTGGCTAATCCAAATCAG
ATGTGCTGGTAATGTAACATGCACAAAGGATTTCAAATAATAGTGTGAAAAAAGTAAAAATTTTCTCATTGTATTTT
TCATAATGATTACATGTTTAAATACTAATACTGTGTATAGGGTTAAATAAAACATATTTAAATTAATTTACCTGGTTG
TATCTAAGTGTCCATCAGCCAATTAACGGATAAAGAAAATATGGTACATACACACAATGGAGTACTATTACGCCACAAA
AAGGAATGAGATCCTGTGCATCTGCAACAATATGGATGGAACCTGGAGGTCATTATATTAAAGTGAAATAAGCCACACACAG
AAAGACAAACCTTTGTATGTTCTCATTGTGGGAGGTAAAAATGAAGACAATTGAWCTCATGGAGATAGAGTGGAAAGAT
GGTTATCAGAACCCTAGGAAGGGTAGTGAAGTGGCAGGGGTGTGGGAGTGGAGATGGTTAATGGGTACAAAAATATATTTA
GATAGAATGATTAAAGATCTAGTATTTTGATAGCACAAAAGACTGATTGCAGTCACAATAATTTATTGTACATTTTTTAAAT
TAAAGAGTATAATTTGGATTGTTTGTAAACACAAAGGATAAATTTATTGAGGTGATGGATACCTCATTACCCTGATGTGA
TATTAGGCATTGTATGCCTTATATCAAATATCTCATGTACCCCATAAATATACCTACTATGTACCCACAAAAGTAAAT
AGTAAATACATTAAATTTACCTGGTTGTAAAAATAAATTTTTGTAAATATGGCTTTTAAAAATTTAAATTTACATGTTG
TGGCCATCATTCATGGTTACATTTATRTTTCTACTGACACAGCGTTGATCTAGACAGTAGACACTACGCAAAAAACAGCTA
AGAAAATTATTAATTTCTTTAAAAGGATAAAAATTTAAAGTGATAAAATGAGATCAAATTTTATGAGCAAGTCCATCGTAGT
TGACTCTGTGCTTGTCTTAGGGAAAAAAATTTGGAACCTTTCTGTAGAGTGTGCCAGTCAATGCAAAAGTGCTCATCAA
GAGAGAATTAAAAACATTAGCAAAATAGGGGCTGTTTGTATGAAAATGAGATTCCAGAGAGGGGTGAGAAGACTGAACACATT
CTGTAAAGCAACAGGGATTAAATGCACCAATGAGAATTGCTTTTTTTTTTTTTTAAACAAAACAAAACAAAACAAAACAAA
ACCCACTAAATTTTTCTAGGGGAAAAGTAAATGCTAGAGTGATATTAGTGAATTAGGGGATTTGTGAAGATGCATTTGA
ATGTCAAGAATATAATGTAGTTTTCTTAGTATTTTTGAATTGAGTACCTTTTGTAACTCAAGAGACTGAGGCTAAG
ACACCAACATTTACCATGTGCTTCAATCATTTCTCAAGGACGCACAGCTCCTCTGAGCTGTAATAGGAATTCAGGTCT
GTGTGACTCCTGAGCCACATGACCGAACGTGTGCCCATGGAACACTGGTCCCTGCAACTGCTCTGCAAAATAATGGTTT
TATACTTAAATCATTTTAAAGAAATGTTGCATGTATCGTTACCGCTTAAACATGATTCATTGATTTGCATATTAAGGC
ACTGAGAAATTGCTAAAAAATGTTTTAACTTTTTTAAATCTTTTTCTCAAACCTCTTTTGGCCACAGAACACCTCCTCCCC
TGCACATGCATCTATATGCCATTTATCACCAGTTGCATGCTGAAACTAACCCTTAGACAGAATGCTATTTGGAAATGCTG
AGATGCCCTTAAATTGCCCTTCTATCATCTCTCATTTATAGTTACTAAGGAAAATGGCTTTTGAAGAAATATAAAATATTTT
AGGAAAATATGTAATTTGATGCTCAGATAACTCACTTTTTGCTACATCAGAAAAAGCAAAACCTAGAATTTAAAAATAAA
CTTGGATGCATGCTCTGGTTATTCTTATATTATTCATAGTGTGTGATCCAAAGGGAGTCAAAGAAATCTGTAGCGAGGCTGC
TCACAGTCTAGGCTCTTTTTGTGTAGGACAAAGGTAGGGCTTGGCTCTAGTTGAAGCTACAGTTCTGTAGGACCTGG
GATTTGGAAAAGTAATGACAAGATAAAATAAGTTTATCACCATCAGAGACCTAAATGGTTGCAAAATTTGGCCATGGTTTACA
TAATGAACAAAAGTTTTCATAACATATTTTATAAGATATTTTATAACATATGTCTTACAATTACTTTTTTTTTATTTTTCTG
AGGTTTTTTCTCTAAATTTATGCTAAAAATGTCTCGAGAAGCATAAAAACAGACTTTTCATTAAATAGTTGCTATAGCAGT
GGGAAATTTTTGTAGGAATTTAAGTAAAAAAGCAAGTTATTTAGCAGTTTGTTCAAATTAGACATTTCTGCCATCAGC
CTGCCCCCTGGGAACTTGGAAAGTGCACTTGTCTCTTGAGTTCTGCTAGTGCCCTAACCCACACGCCCTTTCATGCTCTAC
CATACTTCGATGATCTTGGATTCAAATATGATCCTCTGCCTTCCCTCACAGAAAGAAACAATTTAGGGACATGGACTTAA
TGGTAAATGACTTTCAAAGCTAATGACGTGCAGTCTTTCGGCAGTGCCTAGCCGAACACTCTTTAGACAACCTGCTGCT
TTAGACTGGACATGCACATGATTCCTAAGATACACTAAACAAGAATATGAGATGCTGAGTCCATTGTTTTCTGTGCAAA
ATTCAGTTCACCAAGAATACTATTTTACCAAGAAAGCCATAGACTGTGTGTAGGTAAAGAACTTTTGGCGTAAATGAAA
CTTGTATTATGGCTGGGACTAGGGGCCATAATACCTAGTTTGAATTCGTCTGTCTGCTGTCGCCATATAGCATGAGATMCCA
CTTTTGCCCTCTATAAAGCAGGGCTATGGTTATCTTTCCCTTATTACCTCAGTTGATTGTTGGCTGTGAGAACCAGTAAG
ATATGCTTCATGGAATAACAGAAGAATGCAAGATATTTATCACGGGAGGCAACATTTTTGGGATATCACATATTAGTGGGA
AACTTAAAGAATATTTGAGAGGTTATCTTTGACATTTACATAAAACCATGTATGAAACAAGTAGTCTTTGTGTTTTTTT
AACCTATGAACTTTTTCAAGGTTTTTCTCCACAACATTTCTCTTCAACCAAGAAAATCAGTTTACAGTCATGTGTT
TTGTAAAGACCTAAATGGGAATGAAGGTGGTTAGTAAGAGGGTTTACAAAGATGGAGAGGCTCCCATGACATTTGTAGGT
TTAATCTCGTGCCCATGACCTCTTAAATGTCCCATGCCCATTGAGATACCCCAATTCACTTCAAAGGCAAAAACA
ACGTGACATTTGTGAAATCATACCRGATGTTCTAGTAGAACGTGTGTTCTGGTCCATTAGTTCACCCAGGAGAGGCATC
AAACTCTGCAATCAGAACATATCAACACATGGCCATTTAGCTGATTCTGCCACTTGGTAGCTGTATATTCTCTCTGT
TTAGTGTCTTATCTGTAAATGAAATAATAATAATAGCTCATAAGGCTTTGTGGGGATTAAAGTGAGATAATCATGTAC
AGTGCCACAGCACAGTGTCTACTGCATGGTAAATACTGCAAAAATGTTAGCTGTTGACTGCTCCTATTATGACCTTCAT
TATTA AAAAGGGGAACCTTAGGCTGACGCAGGAGAATGGCGTGAACCCCGGGGACGGAGCCTGCAGTGAGCCGAGATCA
CACCACCTGCCCTCCAGCCTGGGCGACAGCGAGACTCCGTGTCAAAAAAAAAAAAAAGGTGGGGGGGGGGAACTTATGA
ATGCCCTTTCACTTATACCAGCATCATTA AAAATTTAAGTTTTTTAAGAACCATGAAAAGCTAACCAATTGACAAATTAAG
AAGCATGCAAGCTTGGTTTTACAAAAGAACTGGACAAGCTCAGAAATGGGCTAGTTCAAGTGGAGTGACTGCTGCAGGAGCT
CAGGTTTTTGAGACCTTCTGTCTTCTTCCCTTCATCCTTCTCCTCTTTTTGTGTTCTCTCCACACACTTTTCTCATCAA
AGCCAAAACCTTTGTCTTGTCTATATTTCTTTTTTAGAGCCTGCTCACAGTAAATTTTAAAAAATGAAGAAGTGCTG
AAAGTGTAGATAAGCAATTAGACATGAGTTAATGTTTTTTATTGTGCAAGAGCATTGTCATTCTAATATGAACTGAACAT
TGAGTAAATAGATTCTGACTCCCTAACAGGGCTATGCTTTGTGTCTCAGGAAGCCAGCGCACTGGGCTTCTTGGTAGGCA
GGAGACCCAAAGTCATCATCTGCTATTAAGCTGGGTCTTGAAGATGGAGAAGGCCGTAGAAGAAAGGAAAGCCAAAAA
AAGAAAGGAATGAGATTTTGATATTAATTAATAGCTCATACYATAAGCTGGACTTTTGTCTAGGCATTTTCCATGGTAAAT
TTGGTTATACCTCAAACAATTTCTCAACATTATTATCACTGCCACCCTTCTGTTGACAGCTGTGAGAAACAGAGGCTCAT
GTGAGTAAGCAGTTTGTCTAAGGGTTGCATAGCTTAAAAAGTAGTCAATAAGCTAAAGTTTGAACCCCTGAGATGCTGGC

Fig. 6.273:

279/375

CTTCACAGCTAAACTTTTATTAAATTACACCTGCTTCTAACAACAACAACCATGGCTAAAGTTTTCATTAACCTACCAGTT
TCTAACAACATTAACAAAAACATTTTCAAAAAATATAATAATAGTCATCAATAGGAATAAAGGGAAACAATCCAAAAATA
GCTCTGTTGAGGTTACTGATGGATGGGGACAGGAAAGTACAAAATTTTTCTACGAAAGTTTCCCTTTGAGGATCACTT
TCCTTGGCTGTCTTGCCCTGTGAAAATTATACCTTCCCTAATGGCTTGGAGCTGATTGTGCCCTTCTTTCTGTCAAGGAC
AGCTTAACTTTCATGGAATAGTTTATTTGAAGCTTGTGGGTACCAATTCAGGCAGCAAGATACTACTTTTCAGAGATTC
AATTAACCTTCCCTTCAGAGTCACAGCAAAAAGCGATAGAGCTAAATTGATTACCTTGAAGTGCCTTAACCGTTTTGTCTGC
TGTTGTTACTTCTTGAGCCAATTTATTTCTCCAGCAATGTCACTGTTACTGAAGTTGGTCTGTTCTTTATTCTCAGTTT
ATGAATAGGAATCATCTGAATATAGTTATAGACCTCTAGTCTAGATCATTTTTTGC AAAAATTACAAAGATGGGAAAATT
TCCAAGCCATAGTTTATTTCCAAATGGCTGGGAGTGCCCTTAGGAACCTTATTTCTGGAGTCTTTTGAAC TATTTATATTATT
GATATGAACAATGCCCTTGATTGTTAGTTAGCAATCTATTCTATTGATAGGGACATGAAAGGCAGTCTGCTGCCATCTAG
CTTTTTAGTTTTCTATCTTTAGGAATTTTCCGGTCCCTTTCACAGAAAGACACTTTTTTAAAGGAGCAATTCCTTACTTCATC
CCTGAGAGGGAGACACTTATGAAGGTACTGCAGAACTCTTAAAAAAAAGTCTTCATCATCTTTTACTTCTTTTTGCCT
TTAAGTTGGTCTTAAATGGGTAAAAGTGATAAATGTAGGTTGTGTAGTTCAAATCCATTGCAGTGACTAAGCAGTGACC
ACCCATAGGGGCAAAAAC TATGTATTTTTAGAGGCAAAAGATTGATAACCACAGCCATGACCTGAGCAAGACTGTGAAA
TAGATGCAGTTCTTTGCCATCCTCCCTTTTCTGAGTTATGGGCACCTTTCTGCCCTTCATAGCTGTTTCTCTGCAAAAT
GGAGATTTTACTGTGCAAGTCTCCTATTGCTATTGCTTCTTGGAGTTGGTTCCCATGCTCTGGGCACAGGAAAGCAAT
CTGAGATCTTCACTACTAGTATTTATTGAGCACCTATACTATGCCAGGACTGGACTGTGCTCTGAGGTACAGTGGTAA
ACATACCGACATGGTTCTGCTGTATGAGCCTTCCAAAGGAATAGCGAAGAAAAACATTAACATATCAGCCCATGAT
TAAATGCATAATTAGATAAAAAATGCATTGAAGAAGTAAAGATCCCAGGAAAGGAGAGAACCAATTAATATGATGGATGGG
AAATCAAGGCTGCTGGAAGGAAGTAGTGATAAGCTGAAAAATGAGGAGTGAATAGGAATTAGCCAAGTGAAAAGCAGA
GGCAAAATGGGTTTCAGGAAAAGGAAAAACATATGTACCAGTAACATTTCAAGAAGAAATGGGAAGGATTAGATGATTTT
TGTTATTCTTATTAGGTTGATCTCTTCCATGGAAGAGACACACAGAATGTAATTAATTTATAGAATATAAAAAATGATTT
TTTTTTTTAGGAATGGGGAGGTGAGGAGAAGACCCGCTTCAAGTTCTGTTCCAATATTAATATGGTTTTGCTTTCTCTA
CAAACCTAAGTAAAACAATGGTGGTACCAAGGGTGGTTGGGAGGCACTAGTTTTCCAGTGATACATACTCACAAC TAA
CATAAAAGCTAAATACGTATAATCAACATGCTTACACTACAAACAACTTCAAATAAAATTCAGTAGATCAACCGGGC
ACAGTGCCCTCACACCTGTAATCTTAGCACTTTGGGAGGCTGAGGCGGGCAGATCACCTGAGGTGAGGTTGTAGACCA
GCCTGACCAAGGTGGTGAAAACCCATCTCTATAAAAAATACAAAAATTAGCCAGGCATAAATGGCAGGTTCTCTGTATCCC
AGCTACTAGGGAGGCTGAGGCAGGAAAAATTGCTTGAACCTCAGGAGGCAGAGGTTGCAGTGAGCCAAGATCATGCCATTG
CACTCCAGCCTGGGTGACAGAGCTAGGCTCCATCTCCAAAAAAAAAAAAAAAAAAAAAAAAAAAACTCCACTGGATCCT
CTCTTCCAAC TTTTTTCCCCTAATTTCTTCCCTTAGCACTGATATTATCAAAACAAGTGCCCAATCCTATAAAGGCTATC
AGACTCCAATTTAAAAAACTATTAAATTTAAAAACACTCAGAGATATAATGATTGTATGCCTTTTATGAGGAACTTA
GTACCTAAAAGAAAACCTATAACTTAACATTAAGCATATGAAGGTAGCTATTATTCAAATAAGTAGCAGTAAAGACTT
TTCAGCTTTGGATCCTCATAAACAAGACCTGCAGGTTTAAAGATTGCAATACATCTTTTAACAATGCATCATTTTTTATT
ATAGTATATTATATACTATTTTATATTACTTAATGAGATTACTGACCTGGGTTTCAAGATATGTATGAAATATAATTA
GGATATGAAAATTAAGATAAATATATCCCCACCAGAAATAATCTTAGCAGGTTATTTACTAAAGAATCTTAAATCCAGC
AGATCAAGAAAAAACTCCCCAAGGAGTCTTTAATTAGAACTCTTTAGGATGGAATCAAAATCTCTCCATAAAAAATGAAT
CTTGCCCTTAGGCTACATAAAATTACAAAATCTGAAGCCCTTTAAGCAGCATTAAAACTGCTGATTTTAAATTGCTCTGATA
ATGAACTGGAGAGAGACACACTAAGCTTCTGGATTTCTGTTGGAAATGAATGGGATTCTTGCCAAC TATGGATCACAG
TTATGAGGTATTCTGCACAGGGAAAAATCAAAAGAAAGCAGATGGACCTTGACATGCTATGCCATCCTATGCCCTTCTTCC
TTCCCAAGAAGCATGTTACAATAACTTTAAGTGAAGGTTGTCAAACTTTAAGTGAAGAGTCTCCCTTTCTGTCTAAT
TTTTAATGTAAC TTTCCCTTCTCGATATATCCAAAAATAGTTAATAACAATCCCTGAGGGAAAAGAAAAATGCTGCC
CTTCATATTAAAAAAGAAAGATAACAGAGATCCCCCTTAGTGGTGAGTGATTATAGTGAAAACAGCCAACTCATCTC
TTTTGCTCTCTTTTGAGTAAGAACTGGATTTCGCGGATTGTGAATGGATTGATTATAGAGTATGTTCTATGGCTA
CAAAAGAGTTTTCTTTGAGGAAAACTCAAAC TGCACAGATATGCTTGGTATATCAGTTTTCATGTTTCAATTGT
AAATAACAGAAACCTGGACTCACAATAGCTTGAACAAATAGGAATTACTTTTTAAGTAGGTGGCACCGGAGGTGTTTCAG
CTGTTGCATGATGTTATCACCATTTGCAAGAGGCAGCATCTCCACAATTTTCTTGGCTGTCTCTTGTATGGCAAAT
GGCTACTGCACGTCCAGATGATCATGTCTGTGTACAGATAGTGAGAGGGAAGGAGGAAGGATGAGAGAGGATGGCCAG
CTAAAGTTGTATCTACCCCACTTATAAGAAACACAAAGCCCTTCCCAGAGCTTACAGCCCTTTAGCCAGA ACTATGAC
ACATGGTCATCTTGAGTGCAGAAAGATGGAAGTTAACATTTGGTTTTCTGGTCTTTTTAATAAAGATAGCAAGGATGAA
GAAGTTTGGAAAAGACTGTGGGCTAGCCAATCAAATTGTGACCAACATTTGGCCTGTATTAATGTATAGTTTTTAAAGC
CTAATGTCAATTTGTTAAGGTGTCTTAAGGACAGGAAAATGGAGAAGAACTAAGATTTTTTATATCAAATACAGAGTAA
ATCTTGGAAAGGGTGAATTAGAGTGGAAAATAAACTAGACATTATCTAAGAGTGCCTTGAAGCCAGATCTTGCAAAACA
TAGGCAAGCATGTCACTCATAATGGACCCAGGGCTTTCCATCTCATAATGTGGATAAAAAATAACAGTGTCTCTCTCA
GTTTTTAAAAATGTCAACCAAAAATTC AATAAAGTATATACATACATATTGTAATTGTTTTAAAGTAAAAATTTTATGCTG
TTTTGGGAAGAAAAATAACCAAAAAAACCATCACTGACCATTGGTTCATCAAAATCTGATTTATGCCATGTTTACAAGA
TAAAAACAAGAATAAAATAAATTTGTTTGAATATTTTCATCATATTGCCTCTGAAATGATTGATGTCATACTGCCTGG
ATTTAGTCAACTCAGTGAATGATTTATCAGTAGCCATGCTCTAAGGAGCTCTCTATTCTAGATACTTATGATTTGGTG
AACTGGGAAACCCACAGAGAAAGGTAAATGAAATAGGAGAGCCAGGTAAATGGGCCATGGATCTAAGAAC CAGGAATCA
TGATTGTTTGGAAACATATCTCAGACTGAGAAAAGCTGGCGCTAAAGTAAGCTAGCATTTGATTAGAATGTTGAAGG
ATAATTTCACTCTTGAGACAGAAAACTAAGTAGAAGCAAAAGAGTAGGAAATAGAAGCCTGTGTTTGAGAGATTCA

280/375

GAGTGACTGTGTTTTATTAGAAATTGCAAGAAAGGGAACCTTGAAAAACATAAATTTAACATGGGGCAACAGGCCTTGGATT
CTGAACAGAGGGACTTTGTTTAAAGGATGGCTCTGTGGCTGTGGAACAGTTTTTCTATAGATTATCAAAATGATTCTGGA
AAAGAAATGTCATTCTGGACTGAGAGCACATACCATAGGGAACCATGAGGCTTATGGGCTGAATTGTGTACACCCAA
AGTCATATGCTGAAGTCCTAACCTAGGACCTCAGAATGTGGCTTTATTGGAAGATTGAGCCTGTAAATAGGTGATTTTG
ATAAAATGAGATCATTAGGGTAGACCCGAATCCAACAAGGCTGGTGCTTTATAAGAAAAGGAGATTAAAGATGCACGCG
CACACGCAGAGAAGACTACGTGGAGATGAGGAGAAGATGGCCATCTACAAGCCAAGAGGAGGTCTCCCGAAGAAACC
AACCCCACTGACATCTTGACCTCAGTCCTCTGGCCTCCGGAACCTGTTTTAAAAACATAAGTTTCTATTGTTAAAGCCACC
TAAGTCTGTGGTATTTTGTAAATGGCAGCCCTAGGGAAAACTACAATGAGCAAGTATTATTTGTATTTTAAAGAAATAAT
ATTATAAACTAAATTCATGGAGGGGAAAATAGAAAAAGAGGTCAATTTCTGAAAAATTGTATAGGTGTAACATAGTTGA
CACTATCAACTACTACAATGGGATCAGGAGACAGAGGGTCAGTGATAACGGAGCTCTCAAGACTGGAACCTGGGCGATC
CAGAAGGACAGGCGGTTGATGAAAGAAAATGATGAGTGTGGTTGAGGCTGCGTTTCCCTTGAGGAGGTGCTGGTGCTCA
GGGTAGAGGCATCCATCACGATGTCAGAAATGTGTGTCAGACACGAAGGCAGGAATGAGGCTGTGAGGAAGCCATGGC
AACATAAACAGAGAAGTGCCACAGCGAGACAACCAGCCAATGAGTTGTGTAGTTTCTTGTAAGTAGCTGAAACAACATA
ACCAAATGTTCAATTTAGTCTACATATGAAATTTCAATGTCAGAGAAAGGCCTTTAATCTCAAAACGAAATAAACTAA
AAGACATTATTTTCCCTGACAGCTAAGTCTTAAATTTCTTTTGAGAAATAAAAAAATGGTTTTCTCTTTTAAACATAGA
GGCAAAACAGTAAGTCAGATACTTCAGGGGAAGGTAGCTTGGTGATTGTAATGTATGTGAGTGTGAATACGTGAGATTA
GAATCTTACCTGAGAACAAATTTTCATGAGCATCATTGGAGAGTGGGAGAGCATGAAGACTTTTACCCTTCTCTCTGCA
GGAGAGAATTGTGCAGGAGGAGGTGGGGAGAATGCCACCAAGAACAGGTTGCCTGGGGCTAGTTTAGCGATGGGGTCCA
AACGATCTCACTAATGTGAAAGGATCATAGTTACCTTACCAAGGGAAAGTTGGCTTCAACTATATATTTCACTTCTGTA
CCAGGTTTGTCTTAAATGCTACTCTTTGGAGAATATCAAGAAATTTAGATGAGTTTACCAAATCCAAGATTGTGTTCCC
TGCTTTTAACTCTTGTTACTGAAATAGCCCCCTGATCCCCAAGAGTAATGCTTGACTGAGGTGTTTGCATGAATTGTTT
ATATCATTCATTAATTAACGTGATGAACATATTAAGATAGGACTCCAGTTTTTCATCCCAAGGGCTTACATATAATAG
TAACAACCTTTAGAAAAGTACTGCATTGTTTATTTATAGAAATGGCTTTGACTCACTTAATAATGCTCCATAATTAATTT
GTAAATTACTTTTGTGACTTTGACCAATTATAATTTAATGTATATATCTGCAAAAGAAAACACTTTTATGTTGCTAATA
TTAATTTCCCTTCATAAAATTTGAGACTGTTTTGACTATAGATAAATGTAAATGTCAATGTGGTGAGAATGACTCAGCT
TCTCAGATATTCAATTTATTTCTATAAAATATTTTGAATACCTACTATGTTTTCAGGCCTGATCTAAGTGTGTAATAAGTA
GACAAGGACAGCCTGCCTTCAGGTTTTTTTACATTCAAATAACACAAGATGATGAAGAAATTTTTAAATAATCTGGTTC
CATTTGGCAGATAATATAGATATGCTCAGTTTTTATAAATTTTGATACCTAAAGTATTGTGATAATCCAATCATGACCT
TTAGACATTACACTATGCTTATTGATTGAAGGTTGACATATGTTTAGCATATTCTCTTATAATGTATTTAAGGACTTCA
GTGAGTAGACAAAAGAAGTAACTTGATCAGACAACATGATTTCTGAGAACAGACTCTTCTGGAGCAAGCATTCTGGT
TAGATTTTACAGGGCTTCAATAAAAAGGTATATGTTTATGCTTTTTGCTAGTTGGGGGTTTCTAGCAAATGATTCCAT
GAAAACATTGTCAGGGAATTTCCATCTGTTCTATATTTCCCTGATTTGGGGGCTCTGAATCAATAATGCTGATGTAACA
GTTGGCAAATTAGATAAGAACAGCCGAGACTTCCTTTTCCATTAGGTGTAGTCTCATGGAAATCACCTTGAATCCA
TCAATGGAATGAAGCAACTGGGTGGAGCCTATGGGAAAATCCTGGAGGAAGTCCCCAACCTAGTCAGCCTCCCCTCTCTG
CCTTGCACTCTTGGAATTCCTTAGCGAAACATCCAAAATGGCCTTCTTGCAAGGAGGATGCAGTGGTGATCCACATACT
GACCAACAGCTGTGTGTGAAAGGCACCGTGCCACCACAACAAAGGGGCAGTGAGGTCTGCTGAGCAGATGAGTCGCTT
TTCTGGACCCCTTCAGGCTTGCAATTGACTTGATTCCTCAGAGAGATTTGTGAGGGTGAAAGCAAGTTCAT
TGTCCACTTTTAAATGACCCCTCAACTTCTAATGAGGTAATATATGTGAAAGTGATTTTTTTAAATGCAATGCAATACAG
GGTGTTTTTTAGTCATTATTTCAGTACCTGAGGAAAAATGTAACCAACAAAGCCACACATGTACCAAGGCCTACATGAG
TGTAAGTGGTTTCCACCATCTAATTTAGCCCTCTGAAGTGTAGAGTCCATCGAGGCTATTATTTGTGGATTGTGTACTG
AAGTTGCTTTTTCTTTGTTCTCTCCCAACATACACTGTGACACTTCCAACCTCTGATATGTATATGTTAAATACAGGCTGT
TTTTCAAACAAGATAAAATCAAATGCTAGCTAGGAAGTGTGCCTAGAGTTTAAAGCATTTCTAGAAATCTCCCATATAA
CAGCTATACTTATATAATACCTACATTGTGCCAGTGTTCATATATGTGAAGTGCTTTAATCCTCACAAACAAACATAGG
AGGGATGTAGTATTATTACCCCTTTTTACAGATGTGAAAACCTGCAGTACACAAGGTGAAGTGAGAGGCCCCCAAATCAC
ACAGCTAGTAAATGGCAGTGTGACACCTCAAATTCCTAGTCTGTCTTCAGAGTCTATATAATTAACCACTGCTCCCT
GTGCTTTTAAAGGTTAGTTAATGGATATTGTGCTATTTCTAATAAAAGGATATAATTTTTGTTATATATTTTTCTTCT
TAGTCTTCACTTTTGGATCTTGGACCACATGTGCTATTATCATATTTAGTCTATAAGAGACTTCTCTGATAATTTTGT
ATAAAATACACTTATAGAACATTTGTATCTTGTAATGTAATTTTCTTACCATTATCTCATTGATCCCCCTTATCCA
CCTCTAGAATATACAGAGCTTTATCCTCATTTTTTCAGACGAAGAAATGGACCAAGAAGACTAAACAATTTGTTCAACT
CCATATCACCAAGTTTGTAGCAGTTCTGTGACTAGAAACCAATTTCTGGCTCTTAGTCTACATTCTTCTAGTATTT
CAAATCATCTTTTCAATTTCTCTCCCTTATGCTTTTTGGAAAGAAAATTGAGAAGAAGCTTAAGAACCCAGTAAATTTGG
AGAGGCATTTCTTGAGAAATATTTAAATAATTTAAGAAGTCTTCACAAAAGTAGTAGGCAAAATGTGTTACATTAAC
AACGGATCTCATTAAGTCAGTGCATACAGCTAGGTTCTGGTTTTATTAATTTTCAATTTTTTCAATTTTTGGGCTGCTTA
ATCTGAACACTTTGCAAGTACAATTCTGAGTGTCTCATGCTTTGTGCTATCGCTTTCTTAAGGTAGCTCATTTGCACTT
GTTTCATCATCTGTTCTTCCCCAGTCTCCTGGGCTCTGTTGCTAATTATTGACCCAGGAAAGCCTCAGAAGGGGCCA
AGGCAGCTAAAATTTGAGTGTCTTTTACTTAGACTTATAATGCATTTTCCATTTTTCAGAAAGAGTAAAGCACTTTTAG
CTACCAGATCCAGAGACCATTCAGTTATATGGGCACCTGAGTTTCTGCTAAAGAATCACAACCTCAATTTAATTTTTTT
TTTTTTGGTATTTTCATTACAGCCAGTCTGGAGT
TCTGTATTAACATATGAGACAGCAGAATAATAATGTGTCCATTCCATAGATATTTCTCAAAGAGTTGCCAAGAAT

281/375

AAAGAATAGTGCTAAAAAAGGTGGAAGATGGTTAGGTGTAATAATTACCTCCTCTCACAGGACCTGGCAGATGACAAAT
 GCTTCAGAAATATTTATCAAACTGAAATGAGCTATTACATGAATGTATTCTCTGGCTTTTGGAAATCTATTGGGGAAATG
 ATGAAGTCATTAAATATATATGCGAATTGGAAAGGAATTTAGGAATCATCTTATGCGAGCCCTTTTACTTTAAAGATGAAGC
 AATGGAAATGCAAGAAAGTTATGTGTCTTTTCCAAGCAAGATCACACATCTATTTGAAATAATATGCTTTTTTTTCATT
 GTAACATGTGTTTTAGAGATTACACATATGTCAATGTCTGTAGTGCAGGGCATAATGTGAGGAGAGCTGTTGAATGCTT
 TAGAACAGTGCTACCCAGTGGAAATATAATGCACACCCCATATACAATTTTAGATTTTTTATTAATAGCCAGATTTTTTAA
 AAGTTTAAAAGTCAGTGAAATTTATTTTTTTCATACTAAGTCTTCAAAATCCAGAGTGTGTATTATATTTTTTGACACATC
 TCAATTTGGACTAGCCATATTTTAAGTATTTAATAGTTATATGTGTCTTGGGGGGGGCTACTCTATAGACTATATGGCT
 CCAGAATCACAGAGAGGGGAAAAATAATAATGTATTTTTTAAAGCTGCAGTATTTTTTACCATGGGTATATTTTTTAAGTTT
 GATTGTAAACACAAAAGTACAAAAATGAAACAACTGACTCAACACATTTTTTTCTTTTTTTTTTATTATTATACTTTAAG
 TTTTAGGGTACATGTGCACAACGTGCAGGTTTGTACATATGTATACATGTGCCATATTGGTGTGCTGCACCCATTAAAC
 TCGTCATCTAGCATTAGGTATATCTCCTAATGTCTATCCCTTCCCCCTCTCCACCCACAAACAGTCCCCGGTGTGTGA
 TGTTCCCTTCTCTGTGTCCATGTGTCTCATTTGTTCAATTTCCACCTATGAGTGAGAACATGCGGTGTTTGGTTTTCTG
 TCCTTGCGATAGTTTGTGAGAAATGATAGTTTCCAGCTTCATCCATGTCCCTACAAAGGACATGAATCATCATTTTTTT
 ATGGCTGCATAGCATTCCATGGTGTATATGTGCCACATTTTCTTAATCTAGTTTATCATTTGTGACTCAACACATTTTAA
 AAAAAATCTAGAGTAGACCTATACAATTTGACAGATTGCATCAATAGTTTACAATTTTAGACACCCCTACCCCTCCACA
 CATAGAAATTAGTGAATAAGCAGACTGTCAATAGTACTGGCTCAAATAATTTCTACATACAAGTTCTACCAAACCTTTCAA
 GGGAGGGGTAACCTTCTACCTTATACGAATTATCTCATTTTACAAGTAACTATAAGTATACAATAAGTTCCATTTGCGAGC
 ACTATAGGAGCTTGAAGTGTCTGCCAATTTTTTAAAGAATATGCTCAAGCAATAATCTTGGTTATCCATATTATCTTACA
 TTTCTTATGAATATTGAGAGTCTGTATTGATAAATACAAAGGTGTCACTGTTTAACTACTGTGTAGGTCTCTT
 TTGCTATGCATTTACTATTTAAAGCGTAAAAACGTAGGTAGCAAGAAGATTATCTTTCTGGCTATTCTTGAAATTCCT
 GTTCTACACAGATATTCTGCAGAAGCAAGATACTACTGCATTTGTTCAATGTTTCCACAAAAGGTTAATATAATTGTG
 GGTTCAGCTATCACCTTGACCTTTTCTTGGATCTTTGATCAGAGTTTAGGTAATAATGTTGTTAGGTTTCCCCCTTTTA
 AGTTCCTGAGCTTTTTGAAGTAAAAACAGAGCTGAGATAGGAAAGTGAACAGCAAGGGGCGAGCAGCAAGCAAACTGAA
 TTAGGTCACTTTTTCTAGAGGCTTCTGAATTTGGTACAGTAGGATTTCTGTGATCATCTTAAACCTAGCTTTTCAAAAAG
 CTATTACTGTTCCATTTTATTCTCTGGCCAGAAAAATAAATCAGAAGACTTCTACATCCCTTTTCTCAAAAAGCTGATTC
 TGATTCTCTATATGATGCCACATTAATAAAGTTTCCCTATTAATTACCATGATGCCATGCAGCCTTCTAAGATGTTTT
 CTTTAGTTCTTAGTTCCTTTGCAGTTCATCTCCAAGCATAAATTTCTCATTAATAATCAGTACAGTGAGGAAGATAGAC
 ATGTGTCACTCAGTGAGAATGCTTGCAGCTGTAAGTCCAGAAAGTTGTAAGTTAACTGGCTTAAACCAAAGCCATCCT
 GAGGTGGGAGGCTCCAAGTCACTCAGTGACATTATCAAGGCGGCTGAGTCTTTTCTATCTTTCTCTGCGAGCCT
 CAAGTGTGGTGAAGTTTCTGGTGTGTTCTGTAACTCGAGATGTCTGTACAGGTCCACCTATTACATGCAGATAAC
 TATGGCCAGTCAGAAAAGAGGATCTTCTTTTACGTCTTCTTTTAAAGAAAGAAAAAAATCATTTCCAGATGGTCTCCC
 CTTGTCCCACTTCCCTTCAATGTCTTATTGGCCAAAATGGTTTTACATGCCGATGTCTTAAACAAATCACTGCCTTGGAA
 ATCGTACTTTTCATGATTAGCTGAGACAATCAGGTTTTCCCTCATGGTGGCTGGGGCTGAGGCCACCTCCCTGTAAGTAT
 GTGGCTGCAAGGGTAGGTGGATATTTGAATTTCACTGGGGGCTAGTAGGAAGGAATGGCTCTTGGGTAGGCTACCCAT
 AGAGTCAACTACAAGTAAATCAGAACTATAGTATCATAAGTGCTACAGGGAAACATGTAAATGCAGGATGCTGTAGGA
 ACACGCAAGAAGGGCCCCCTGGCCATGCTTGTCTTGAGCAAGAGGGAGAGAGGAATGCCAGAGTGGGCTTTTAAATGAAAAAT
 GTTATCTGATCTGAGATATAAAGCTCAAGAGGAGATAGCCAAGGAAGGGTGGTGAAGGAGAGAGAGGGTATCAGGTA
 GACACAGTATCATGTGCAATGACTGGGAATAAGATAAAATGTTGTAGGTTTGGGGAGATGCAGAAAAATAGTTGGCC
 TAAGGTATAGCATATAAGTTGGGGAGTCAGTCAGAAATAGGGCTATAGAGGTAAACTGTAGATCAAAAAGATCTGATA
 AGTCACATAGAAATTTCTACTTTATTCTGTCTGCAGTGGGGAGCCAGTGAAATATTTTAAAGCAGCAATAAGACATAATTA
 ATATGCACCTTCAAAAAAAAATGTCTTTGGCTGTCTGTGGGAAATTGGATTGCAATCTTCAAGACCAAAAGTAGGTAGA
 ACATGTGAGAATCAATTACAATATTCCAGGAAAGAGTGGTGAAGGGCTTTAAGATAATGTCACTGGGGCTGGAGAGAGG
 TGAATAGGTTTGATTGATGTTTAGGGGTTTTGACTAAACAGGACTTGGTTAATAGGTAAGAGAAATAGGGATTAATAAT
 CACTCACATTTCTGGCTTGGACAACCTAGGAGGATGGGAATGACATTTACTGAGTTAGGATATCCAAGAAGAAGCAGAC
 TGGGGGCAAGGGGAGTGAATTAATTTAAATTTGTAAGTTAACTGAAGGGCTTATTCTGTATGAAATTCAGAGAAGTATTCC
 AGTCTTTAAAGCATTTTCAATGCCAAGGGATATATTAACCAATAAGTGGTATAGAACAATACTAGGGGTACTATAATT
 TATCACAGATGGTCATCAATAAAGCAAGAGAGAGAGATAAAAGAGCTTAAAGAAGAAATTGCCTCTCTCTCAGAAAGAA
 TTAGTGGGAGAATCTGATGTTCTTCATGAAAGAAAAAAATTTTAGTTGAATCTTGCATAAAAAGATTAGACAGATGGGA
 ATTGTGAGGGGTGGAGGCACTGTACACTACATGAAGCATATTTAAGGAATGATAACAGTCTAGATTGCTAGCAAGCTTG
 AATAGGCAAAAATAAATAGAAAGGTTAGGGAYTAGTTGAATTAGTCAGAACTGTTGAGATTCCAAGAGAAAAACAAAAT
 TCACATTTTCTGTGTTGATCTATTATTGCAAGGTGCATTAGTCAGCTATTGCTACAGTAATGCTACCGAACAATCAACT
 ACAAATACCAATGACATTTGCTTCTTGTCTCATAGTCTACTAATGGGTGAGAATAGTGTGCTTTCAGGCTGCAGGTTG
 CCTTCATGCTTGTCTTCTCATGTTTCTCCTTCTTGGACAGTGATCTCCAGGGCGTGTCTTGTGGCACAGTTTACAAC
 TCCCAATGTGGCAAGTAGAAATGTTCAATACTTTGTAAGGCCTCAGTTTATAAAGCAGTATCATTTGTGCCACATTCT
 GTTAGCCACAGCACAATAATRTGACTAAACCAATATCACTGAGGGAGGAGAGCATGAGGAAGAAAAGGATGGTGAATAT
 ATGCTGCAATGCCTAAAACATAATGTAAATATAGATAGCATTTGATTTGACCCATAAGCCATAAAGATTCTAGAATACC
 AGTGTTCCTCAACTAATGAGTGCCCCAATGAGCTTCTTGACAACTCAGGAGAGTAACCTCCATTTGTGTGACCTCCTTTC
 TTTGCTCTTTAATTGTGCTTTTTTCAAGGGATGACATGAGCCATAAACTACTCATTGGGTGCTTGGTGCAGAAATCAGAA
 CCAGTTACTTCAGGACTGTCTCATTTTCATGATTAGTTGCCTTTGGTCTCATGCAGTGGTATCAGTTTCTTCTCTAGAG

282/375

GTTTATGTTCCCTCAATCACCAGCAATACTGAGTGAATGATAAGAACTAAAGCAATAAAAAATGATTGAACTATTTTCC
TTAGTATGTAGTTATTTGGACTTCTTCCAAAAATCCAGCACACTTATAAAAAACCAAATAAGGCATTTTGTGTTATTG
TGCCAATAGTGTGTCCTAATTAGTCCGTGAGAATTTATGTGGCCCATGAAAGAGGCATAATTTTCTAAGATTGCACAGC
TAAGTTACATATCTGAGACTTGAAGACATCCTCAGATTATGTTATCCCTAAATCTCTAATTGCTWTGTAGCAAAAGATT
TTAGCCATTTTTTTTATCTCTGAATCAAGGATACATAAATAAAGTTGTATTCAATCAATCCAAAAATCCTCAAGCCCCAA
TAATCCTAGTACTTGAAGCAGACCTTATAGTGTGTGTGCACAAGTGCGCATGCGTGTACTCTATTTTTAGATTATCTTTT
AAGAGGGACCGGTGACATGGTCATACAGTACAACAGAAGAACTCACTCCCTGTTTCTCTATAATTCCCATATTACACTC
AGCACTTGCTCTCTTTTCAATTCTGTGGCTTCTGTGCTGCTAGCAGTGACCAGTGACTCAGGAAGGCTGCATATAGTGAA
GAAAAAGTTGCCTTTCCAGGCACAGTTCAAGTCCGTGAGGCGCCTTTTTCACACCATCTCATAGACATTTTCAGAGCCAACT
CTAGCTTTCTTTTATGACTACTTTTCCATTCCACACTTTTCTTAATGTTGCAGGAGATAATTTGAAAGAAAGGAAAAA
AGAACAGGGAGAACACAAAGGCAAGAAGATGAGCAAGATGCCAGATTTAAGAAGTATATTTATATTTAGTTCTTTACAA
ATTAATTTCTGCTGAGACCCCTTAATATTTAGCTGTACAGGGGTTGTGCTTGAAAACTTGATTCCAACCTTAAGCATA
AAAACTTTGTCTAGGCAGGGCAGTAGATTGGAGGATTATCATTTACACATTATAGGAGGAAGGCCCTGTTCAATGCCAGG
TTCCAAGAATGCCATCTCAGGGAGCGAGGGAAAGACATAGGCCAGGTAAACATGTCTGATGTATGGAGAAAAGCCCTCAG
GGTGCCATGTTGGTGGAACAGGAGCAGAAAGGAAATCAGACTGAGAGAATGAAAACTCAATAGAAGCACAATAAACAGA
CTGAACAAAGTACAGATGGAGTCAGTTCAAGTTTAATATGAATGTCCCTGGGCCCTGTGTTTCATCCCAGTGTTAAGTG
CAGGAAATCATTTGGATTCTCCAAGGATGGGTCTTTAGAGCAACCGACTTTAGAAATTGAATACTTTAAAATTATTTTC
TATAAAACAAATTTATCAATAGAAAAATAGATTACTTTAATTTGGTTTATCTTAATGAGAAAAACAACAAAAAGCTTCAACA
AATAATTTGTGCTGATTGGTTGGTTGGTTGGTTGGTTGGTTGAATTAATGAGAAGGAAAGAAAGAAAGAAAGAGGAGTA
GAGGAGGAAAGGAGGTTGAGAGAGGGAGATTTGAAAGGGAAATAGCGGTGCTCTAAGTTCACAATTTTTTAAAGCCTAGA
GTTATTAACAAATTTATGCCCTCAATCAGATTTTATATACTTTTTTCAATCTTGTCTATATATTAATGTGCTGTATTCTAT
GAAATGATTTTGGAGATTTTAAAGCAATGATTGACAATATAGTAGTTTCAATTAAGTTTTTACAAGTTGCTGCTGACAAA
ATATGGGTAAATGAATTTACATCAAATAAGTATAAATATAAGTACACGCTTTGAAGTTAAACTCAGTAAGTTGTTATGAT
TAAATTTGTTCACTTTATTTTCCCTCCTGTGTATGGGTTTCTCATAAATGGTAACTTATACCTATGAAAATACAGGGTTC
TATAAAGTCTGAAAACATAGTTATTATATATCTTAACGGACCGAAGATGTCTTCTGTATATTATGTATAGCCTGTGTT
TCCAGACTAAGTGCCAGGCACATTTCTAAGTTAGGCACGATTTCTAAGTGTTTTACTGTTTCAATTTAGGCTGTCTGGCTAG
TGTTTTTCTCACCTTATCAGCATCCCATTTTTTATTAAGTGAATTTGCCATAACACACCTGCACACGCACATGCATGCGC
GTGCACACACACACACTTTTTTGCATTTGGAAGCCTGGCTATTATGGAACCTCTAGAACATGAGAGCTCAGGGTCAACCAC
CAAGACTCAATAAGGTATGGCTGGGGATGTGACCAAGACTATCCTAGCATCTATGGCTGTGGACTGGGTGTCTTCTCCA
CTGACCCCTGAAGGTAGTTTTGCTTCACTGCTTTAGAAATGGTGCAGAGACTTAATCTTATTTCACTTTTCCGGTGTGTTG
TCTTGGTTTCTGTAGAACTGGCTTGAGGCTTAGAAGATGTCTTCCACCCTGCATTTGGAATAATACATTTCTAACACTT
CTCCTCATATGGAAATTTTTAAGTCATTGAAAACTCATACCTGCAGCATTTGTAGAAACAATTTTCAGAACAGAGTACCT
TATTGCTTTTCTTAAAGAAATTTTAACTGTGCATGTATAAGTATTATAAATGCATAAAATATATAGTTAATCCAAAAGA
CATAACTATATCATGCATAGTAGTTATAGGTCACCTCAGATATATTAGTAACATCTTTTTTATAGAGACTCTGTTGTTAT
TTCACTCACACAAAAGAATAAACACAGAAATTAAGGTTGAAATTTACATAAGACCAGTCTAAAGCCAGCCATAGCTATGT
AATTTCCATGATTTTCTCCCAATCAATGGGAAATTTACTGTGAGTGAAGTCTGAGCAGTCTGAGACTGTGAGCAATGTCTG
TTTTCTTCCCACAACTGAGTGTGTTGAAACTTTTTTCAATCAGTAAATTTACCATTAAAGGTCAGAGATTAGTTTCTCAT
GCATGATGGATTCCATTTGCTTTTAAAGTATTATACCAGGAGAGTAGACTTTTTTTCTGACTTTTAGAATCAAATTTAGAA
TTCAAATATTTCAGAGTTTTGGGTCAACCTCAAACCTATTTTATTTTGTGTTATTTTCCCTTGACAAAATGTTATTGTTTTA
AATAGGGAAGGAGAAAGGTCTTGGGAAAAACACACACACACACACACACACACACACATATATATGTACTCTCT
CATATTTGAAATTAGCATGTAGTTTAAAGGATACTGCACACAGCTCTATGATGAGCTTAACTTGAATCTCCTTAGATTAT
GAGCATTTTGAAGCAGGGACTTGATTTTTTAACTAAATACCTTTTCATGTTTGATAACCTGTTCCTTTTCTGTGTGTA
TTGTCTTAACTAAAGACTGCCTGCAATGAACAGAAGGGCTATGGTCTTTTTTTTTTATTAAGATAAAAGAAATTTCCAAAT
CGTTGTTTATAAAATAAAAGATTAGAAAAATTCACCTGTGTATAAATGAACTAGACTTCTATAACATAGCAGCCATCT
TGTGCAGAAAGGGCTGCTTACGTAGTTTATTTCTTTAACACACAGTTGCTAATTACAAAAACAGCATGCATCCAGAGA
TTGTGAAAAAGAAAGTTAAAAAAATCTTGCCATTTATTTCTACCACCGTAACACAATTATGTTTAAACATTTTTCATATT
TTTAATTTATTTTCTCTTTCCATAAATTTCTAATCTGTCTATAAATGTACTATTGTGGTCTGCTTCGTTGACTAACAGAA
TATTTTCAACCCCTTTTCAGAACCCCTTTTTTTTAAAAAATGGCTTCTTTTTGTGTATTTGAAACAATTTCAACTTAACCCCTAT
TGCATATATTCTGTAAGTAGCTGTCTTTCATGAAACAGACAACTTTTTCTTTTTAAAAATCAAGGAGATTGTACAGAACT
TTGTGATTTTAATTTACTGCATGGCAACTAATTCAGTCTCATATCCCTTTCCATTTAATAGGGGATTGTCCCTAGCTATG
TGACCTAAGCAAGCTCTTTAACTGTACTCCACCTCAATTTGCTTATCTGTAAAAACATGGATAATATATTTTTAGTCTA
AACTTCTCTGGTATGACAGAAAAGACCAATGTGAAACAATTTCCCTGAATTTGTCAATAAAACCATGTTACATTTATAA
AAATGCCTCCAGTGTACCCAGACCAGAGGAATCTGTGGCTTATACTAAAACGTGTATTATGTATTCTTCTCAAGGTAT
ATGCCAACAGTTAAGTTAGAAATCCATCCCTTTCTGTCTCACTTGTCCAAAGTCAATTACTCCATGCTTCTTTTACATA
AGGAAACTATCTTAAAGGAGGAAGTAAGATACCGGACCAACAAAGTTTCAAGGTTCTTCAATTTTACTGCCTTTCA
AAAGTTAAGATCAGAGAACTTAGACATGCATAAGCTTTGGTTTGGAGGAACAAATGAGTCAACCATCGTAACAGAGGCG
CTGAAAGTATCTGAAGGTAGAAATGAATAGTTTATAGTAAGCCAGTCCACTCTCAGCTCTGAGAACATCTCAGCTGCATAA
CCTCAAGGGAACTGCGTGGAAAAAATTAAGGGAAATTTCTTGGGCTTTAGAGCTTTTCATTTCTATGAACAAGGCATC
TCCTGCCCTTTGTCTCACCCATATCTCCATTGTCTCATGTAGTCTTCTGCTGGTTCACTGTGTGCTGGCAAGTCAGGT
TCTTACGCGAGGGAAAGAGCTGTTTTAAGTTGTTTATGAATAGAGAAAGCAGATTCAAGTCAGACGTAATCTGACTCTGT

283/375

ATGCCTGCAGGGGTTGTGGCCTTTGTTAGTTTATTATGCCTGTAATTTGGGAAGTCATGCTGCAGAGATGTAAAGTGGG
ATGGGCCTGAAATAGGTCTTGTAAATAAAAAGGCAGTTAGGGGAAGCCTGCTGGTGTCTGCTGGTGTACTACTATCTAAG
TGCAGCAATGTGTTAGTTGATTTTAAATAAAGAGTTGAAATCATTGTTAACTGGCCTCCCTCCCACTGAGTGAAGAAGGC
AGATTACACAGGCACACGTTTRCCTCCCCTAGTGTGTACTATGAATGCAGCTGCTTCTGAAGGGCCAGCACGTGGCCTT
CTTAAACTTTTCTTGGCTGGGGTTTTCCCTTCTTGCCAACGGTGGCCACCAAGCCAGTGGATGCTCTCAACGCTAG
GCAATGCCAAAATGTCATCTTTGGCTCAGATGTGCACTGGCCTGTTAGAGACAACTGCCATGCAGAGAAGGAATGTC
ATCAGCTGCTAGGTCTCAAATTATCAGCCTGGATTGACAGCTGCAGGATGTAGTGCCTGCCTATAGTACTGAGGCCATG
ACCCACCTCTGGAGAGACCACAGCCTCATCCCTAGAGTAGAACTGGAAATTCTCCATTGAGACAGGAAGGCAGCACTTG
AACCTGGCAGGTTTTGGAGTGAAGTGTCTAAGGACAGAATTTCTCATTCTCCACCTCTGCCCATGTGTAAGGCAGCAA
TATTTTCATAGAGGTGAAGAAGGCAGGTGTCCCGTGGTTATTATGACATCTGTTTACCTCATTCTAGTCACTGTGCCAT
GTTTCACAGCCATTGTCAACTACATTTGGTGAAAACCTGTTTCTCCGTCCACAACCTGGAACATTGACACTAACCACATT
CTAGAGTTCATTACATAGAGCTGTGTCTGTGGGTAAAGTTAACAGGTAGTTTAAATAAAGTATAGTATAGTCTTTTCTCT
TCCATGTAAGCCAAGATAATATTTCCACTTCTCCTTCTGAAACATGTGAGTACAGTTTATATATAAATCAACAGCAAGAT
GGAAATTTACTCTGAGCTTTGTGATGTTTTCACTTTAAGATGCTGTAGTTCGTATCCTTTATACATTTATTTTCATTTTC
CCCATCTCAACCCAGTATATAGCAACACTCACCTGCTCTAGAACATGATTATCAACTGTTTCAGCTATCAATGTAACA
TTAAAAAAGTTCTATGTTCAAAGACTAAAGGAACCCAGGTAGTTTCTTTTAAACAGAAAGACTAGTTTTCATGATC
ATAAACATGTAAAGAAATATGTCAATTTTGAATTTTCATGAATCTTATGTCTATACCGATTCCAATTCCAAACCTCAGAC
TGGCAATCTGCCTTTATTATTGCAAAGCCCCRTAGCTTGTATCTTCATGTACCTCTTGATCAAGTATTTAAGTGAAAT
AAAGAGTCTAAATGTTACGGGAGGTGAGTCCAGGCAGGGTCTACGGCCCTCAGTTTTGTCTTCTGGAAGAAAAAAT
TCAGCTGAGAGACAGATGTAGATTTTCAGACAGAAGCAAGATTTATGAAGCAAGTACATTTGGAAGGGACCAAGTGG
GCAACTGGAAAGATTGAGTGTCCCGCCTGATTATTGGCTCAGGACTCTTATAAAGTTACTATTTCTGATTCTTCTCTGA
TCTCTCTCCATCATACTTCTTTTTGGGCCAGCTGTTGGCTAATCGCCGCTGCTCAGTGACTTGGCCAGTAATCTGGGAG
GGGCTGCATGCGCCATTTGGTGGTTGTAGTTATGCACATGTACTCTTTGGGCAATTTTCTTTACTGGTCTAGTGCCCC
CAGAGGAAGGTATATACAGTCAAACCTTTGCCATTTTGCCCTTACTGTGCATGCCTGCTCAATTCCTAGGGTTTTAT
CGCAAAGTTGTTGCCCTACAAGCTTAAGATGTTTCTGTAGGAAATTTCCCCCTCCCTGGTGCCAGCCATGACCATCTA
TCATTCTGAAGAGGCCACCTGACAGTCACAATGACAGTCATTGACTGTCTCTGACATTCTTGGGGCCCTATCCTG
CCCTGCTCATATCCACCTATCTACCTACCTAACATATTCCCCCTCAAGAGTGTGAGACTCAATTATTTGGGGCTAGT
GGATGAAGGTGAGTCTCTGTGGCTGCTTCTGCTGAAATAAGGGCTGTATTGTCTCTGGGTCTCAATCTCTTGCTA
ATTGTGAGAACAGAAATGGTCCCATCGGTAGGTAGAATTGGTGTCCAGCCAGGTCCAGGGGAAACAGGTGTATGTTTTCT
TCACATTTGGGTAGGGAGGTAGATATTCTGTATTGACAGAAATTTCTGCTCCTCAGTTCAGCTAAATCCAGGTTCGTGT
CACGACCAGGAAAAGTTAGGCATGCAGACACGTGGAAGGGTGAGGGGAATGGAATTTATTATTTATTGGGCGAAAAGGA
AAACAAGAAAAGAAAACTTTTCAGCAAAGTGAGAGGGGTTTTCTGCCAGCAGGCTCCCATCTCAGAGATTGGATTCCAAG
CCCCACACACGAGCTAAAGTTCCAGGCTCTTTCCCCCAACAAGGCATGAACCTTCTGGTAGCTTTACCCCATCGTC
GCAGTGCACAGGCGGGGGGAGATTCTCCAGGGATCCTCCCTCTTATCTGCCTCCTGCATCTATCACTGCATTATTGG
GAACCTGGTTTGAATTTGTTATATCTTGAGAGAAGACAAATTTATCTAGTAGGTTAAAAGGCAGGGGCCAAAAGAAGTA
GACGTATGGAGACAGCTGGTTTCGAGCAGGGGAGGAACCATGTGAGCAATGGGAGAGCAGATTTTACAGAGTTCAGATG
GAATCTGTGAGGGATTTTCTTTCCAGAGTCATGAAGCCACTTACGCTGGTGCACAGATCTCTTTATATGTTCTCTTA
CTTGCCCACTATTGTTGACACAAGTGCAATAGGGTTTTATTGATGACAGCACAGACGACTCTGTTCTGCAAGGAGGTAAT
CTAGAGCTAGTCTGTTGTCCATGACTGCATTAGCTACTGAATTCAGTGAAAGCCTTGAGTTTAGAGATTCTGTTCCCACT
TCTCTGACCTAGGTCTCCAATTTGTGTAGAGAGGTTTTGGAGGGTGACTTTATGATAACTGAATCCTCTGTATGGGGCA
GCTAATCCTATGGCAGCCCTAGCCCTACCATATAAGGCCAAGAGCTCTCCTTTTTTAAGAATTTGTAATGTTATAGA
TGGTTACACCTGTTTCTTGTGGCCCCAGGAGTCTAGGGCACATCCCTGTATGTTGGGTGTTATCTATGCAGATAAAA
AGGTTTACAAGTGAGGGGGTTGAATAAGTTCTTTTAGAACTTCCCTCACAGGGCAGTTTATTTTGTATTAGGTCCATATA
AAAATACATAGCCTGGAGGGGTGTAGGCCCCACTCGGAATGTTGGTTTTGAACCAAGTGTAAAGCATAAGCAATCCCACC
ATGAATAAGATCCAGAGTACTGGGGCTACCTTATGCTGAGCTAGCATTAGTTTGAAGAAAAGAAGGCATTACTTATAA
TTTTATTGAAAGAGATATTATAGATCTTCCAATGACTCACAGGAATACTCAGGTGCTGGTCTATTGTTGATTGTTTCAG
AAGCCTCTCAAGGTTTTATTAGGAATGATGTATCCAACCTAGAGGTGCCAGGAACCTTGATAGCTGTTGCAGTGGAAAG
GAAAACAGTAAAAGGGCCTTTCCATGAGGGGATTAGTTGAGATTTTGTAGATCCATCACTTTAGGTTTTAATAAGGACC
TGGGTGGGTACACAAGTTGGTTGTAGAGGGTCTGGAGCCAGCAGTACTCTCTGTATATATATTTGGTTCTAGGTATGA
AATTCTCTGTCTTGGATTTGGATACTTTGTACCTTACATTTTGTAGGAAGKTTAAGGTTTGTACTGCATATTGTTGTG
CAAGCTTTATGGAGGGGGAGCAGATGAGTAAGCCATCTACATACAGCAGAAGTTGTCCCCACTCAAGATATAGCTTGGT
TAGATTTCTTTGCTGGGTCTTGTCCAAATAAGTGTGGGGCATCTCTAAAACCTGAGGTAGGACTGCTGGCTTTCTCTGG
GAGAACTGGGATATTAGGGGGAAATATCAGTCCAGATGTTGGGTAAATATTAAGTGGATACCCATTTTGGAAAGTATA
TTCTTACTCAAAGCAGTGTGAGGCATTTAGACATTTGCCAGGACTAGTGGGAGAATAGTAATTAGTCCCATAGCAAT
ATAAATAAAGGGGATGTGAATCTTTAGAGGAAGGGGTTGCTACTGTCTCTGTTACCCAACAGAATTTGGGGGTAAGTT
GCTATAGAAAAAGGTTAGCACAAAGTAGGCAGTTCTTGTATTTAAAGGATATTTATAGCAACTACCTGTCAATTTCCAG
AGTTTCCCTTGGCTCTGTTCTTTAATGATGATGTCTGATTTGGAAGCTGGCCAGAGTGGAGGGCCCCCTTCAGCTCAAG
GCCATTATTGGATGGGGGTTCAACTGGGGGACCTTTTGGATCCAGGGCAGTCCCTCTTCCAGTGGGACTTATCTCCAG
CTTATCACAAAGAGGGCAGGCTGTGTGGGGCTTCTCCCATTTGGCCCATTTGGAAAATTCCTTCTCCAGTAGCCTGGT
CTTCTGCATCAGTGGCAGTTACCTGGAGGAGGGTCTTAGGAGACCCTGGAGGGGGCTGGTGGGCTTGTAAGCAGCCA

[illegible]

Fig. 6.27

285/375

GATTTTCCAATTTTCATCCATGTCCCTACAAAGGACATGAACATCATTTTATGGCTGCATAGCTTTCCATGGTGTAT
ATGTGCCACATTTTCTTAATCCAGTCTATCATTGTTGGACATTTGGATTGGTTCCAAGTCTTTGCTATTGTGAATAGTG
CCGCAATAAACATACGTGTGCATGTGTCTTTATAGCAGCATGATTTATAGTCCCTTTGGGTATATACCCGGTAATGGGAT
GGCTGGGTCAAATGGTATTTCTAGTTCTAGATCCCTGAGGAATCGCCACACTGACTTCCACAATGGTTGAACTAGTTGA
CAGTCCCACCAACAGTGTAAAAGTATTCTATTTCTCCACATCCTCTCCAGCACCTGTTGTTTCTGACTTTTGAATGA
TTGCCATTCTAACTGATGTGAGATGGTATCTCATTGTGGTTTTGATTGTCATTCTCTGATGGCCAGTGATGGTGAGCA
TTTTTTCATGTGTTTTTTGGCTGCATAAATGTCTTCTTTTGAGAAAGTGTCTGTTTCATATCCTTCGCCCACTTTCTGATG
GGGTTGTTGTTTTTTTCTGTGAATTTGTTTGAGTTCATTGTAGATTCTGGATGTTAGCCCTTTGTCAGATGAGTAGG
TTGCGAAAATTTTCTCCATTTTGTAGGTTGCTGTTCACTCTGATGGTAGTTTCTTTTGCTGTGCAGAAGCTCTTTAG
TTTAATTAGATCCCATTTATCAATTTTGGCTTTTGTGTCATTGCTTTTGGTGTTTTAGACGTGAAGTCTTGCCCATG
CCTGTGCTCCTGAATGGTAATGCCTGGGTTTTCTCTAGGGTTTATGGTTTATAGGTCTAACATGTAAGTCTTTAATCC
ATCTTGAATTAATTTTGTATAAGGTGTAAGGAAGGGATCCAGTTTCAGCTTTCTAAATATGGCTAGCCAGTTTCCCA
GAACCGTTTATTAAATAGGGAATCCTTTCCCATTTGCTTGTCTTCTCAGGTTTGTCAAAGATCAGATAGTTGTAGATA
TGCGGCATTATTTCTGAGGGCTCTGTTCTGTTCCATTGATCTATATCTCTGTTTGGTACCAGTACCATGCTGTTTTGG
TTACTGTAGCCTTGTAGTATAGTTTGAAGTCAGGTAGCGTGATGCCCTCCAGCTTTGTTCTTTTGGCTTAGGTTTGACTT
GGTGATGCAGGCTCTTTTTTGGTTCCATATGAACCTTTAAAGTAGTTTTTCCAATTCTGTGAAGAAAAGTCATGGGTAGC
TTGATGGGGATGGCATTGAATCTTTAAATTACCTTGGGCAATACGGCCATTTTCACGATATTGATTCTTCTACCCATG
AGCATGGAATGTTCTTCCATTTGTTTGTATCCTCTTTTATTTTCATTGAGCAGTGGTTTGAGTTCTCCTTGAAGAAGTC
CTTCATGTTGCTTGTAAAGTTGGATTATAGGTATTTTATTCTCTTGAAGCAATTGTGAATGGGAGTTTACTGATGATT
TGGCTCTCTGTTTGTCTGTTATTGGTGTATAAGAATGCTTGTGATTTTGCACAGAACCTCTTTAAAGCGTAAATCACA
AAGGACCTGTAAAACAAAATACAAGCTAAAAGCGAAAACAAAACAAAAGTATACAGGCAACAAAGAGCATGA
TGAATGCAATGGTACCTCACATTTTCGATCTGACATTGTAATGTAATGGCCCTAAATGCTTAAAGATGTCAGAAC
TGACAGAAATGATAAGAAGTCAACCAACCACTATCTGCTGCTTTCAGGAGACTCACCTAACACATAAGGACCAACATAAA
CTTAAAGTAAAGGGGTGGAAGAACTTTCCATGCAAAATGGACACCAAAAGCCAGCAGAGGTAGCTATTCTTGTGTCACA
CAAAACAAACTTTAAAGCAATAGCAGTTAAAAGAGACAAAGAGGGATATTATATAATGGTAAAAGGCCTTCTCCAACAG
GAATATGTCACAATGCTAAACATATATTCACTTAACAATGGAGCCCCAAATTTATAAAACAATTACTAACAGACCTAA
GAAATGAGATAGACAGCAACACACAATAGTGGGGGACTTCAGTACTTCACTGACAGCACTAGACAGGTCTATCAAGACA
AAAAGTCAACAAAGAAACAATGGATTAACTGTACCTTGGAAACAATGGACTTAACAGATATATACAGAACAACCTGCA
AAATATACATTCTATTCAACAGTGCATGGAACCTTCTCCAAGATAGACCATATGATAGGCCATAAAATGAGCCTTAGTG
AATTTAAGAAAATTGAATTATATCAAGCACTCTGTGACACCACAGTGGAAATAAACTGGAAATCAACTCCAATGGAAT
CTTCAAAACCATGCAATACATGGAAATTAATAAACCCTGCTCCTGAATGAGCATTGTGTCAAAAATGAAATCAAGATGG
AAATTATACAATTATTTGAACTGAACAACAATAATGACACAACCTTATCAAAACCTCTGGGATACAGCAAAAGGTGGTGCT
AAGAGGAAAGTTTCATAGCCCTAAATGCCTACATCAAAAAGACTGAAAGAGCAAAAAGACAACTTACAGTCCACACCTCA
GGGATCTAGAAACAAGAACAAACCAACCCCAACCCAGCAGAAAGAAAGAAATAATCAAGATCAGAGCAGAACTAAATG
AAATTGAAACAAAAAAACCATACAAAAAATAAATAAATAAATGAAACAAAACCTGGTTCTTTGAGAAAAATAAATAA
AATTGATAGACCATTAGCAAGATTAAACCAAGAAAAGAAGAGAGAAAATCCAAATAACTTCACTAAGAAATGAAACAGGA
GATATTACAACCTGACACCACTGAAATACAAAAGATATTCAAGGCTACTATGAACACCTTTATGCACATAAACTAGAAAA
CCTAGAAGAGATGGATAAATTTCTGGAAAAATACAACACTCTTAGCTTAAATCAGGAAGAATTAGATACACTGAACAGA
TCAATAACAAGCAGAGAGATTGAAATGGTACTTAAAAAATTATCAACAAAAGAAGTCCAAGACCCGACAGATTACAG
CAGCATTCTACCAGACATTCAAAGAATTGGTACCAATCCTTTTGACACTATTCCACAAGATAGAGAAAGGAACCTT
CCCTAATTCGTTCTATGAAGCCAGCATCACCTTAGTACCAAAACCAGGAAAGGACATAACCAAAAAAGAAAACTACAGA
TCAATATCCTTGATAAACATAGATGGTAAATCCTTAAACAAAATACTAGCTGACTGAATCCAACAACATATCAAAAAGA
TAATCCACCATGATCAAGTGGGTTTCATACCAGGGGTGCAGAGATGGTTTAAATGTACACAAGTCAATAAATGTGATACA
CCACATAAACAGAAATTAACCAAAAATTCATGATCATCTCAATAGATGCAGAAAAGCATTCAACAAAATCCAGCAT
CCCTTTATGATTAAAGCTCTCAGCAAAATCAGCATAACAAGGACATACATTAATGTAATAAAAACTATCTATGACAAAC
CCACAGCCAACGTAATACTGAATGGGGAAGGTGAAAGAATTCCTCTGAGAAGTGAACAAGACAATGATGCCCACT
CTCACCCTCTTCTTCAACATAGTAATGGAAGTCTTAGCAAGAGCAATCAGACAAGAGGGGAGAAATAAAGGGCATCCAA
ATCGGTAAAGAGGAAGTCAAACCTGTCACTGTTTGTGATGATATGATTATTTACCTTGAAAACCTCTAAGAAGTCTCTCA
GCAAGCTCCTAGAAGTGAATAATGAATTCAAGAAAGTTTCTGGATACAAGATTAATGTACACAAATCAGTAGCTCTTCT
ATATACCAACAGTGACCAAGGGGAGAATCAAATCAAGAACTCAACCCATTTTACAATAGCTGTAAAAAATAAATAA
AATACTTAAGAATATACCTAACAAAGGAGTCGAGAGACTTCTACAAGGAAAACCTACAAAACACTGCTGAAAGGAATCAT
AGACAATACAAACAAATGGGAACACATCCCGTGATCATGGATGGGTAGAATCAATATTGTGAAAATGCCCATACTGCCA
AAAGCAACCTACAAATTCAACACAATCCCATCAAAATAACACCATCATTCTTCACAGAATTAGAAAAACAATTCTAA
AACTCAGATGGAACCAAAAAAGAGCCTGCATAGCCAAAGCAAGACCAAGCAAAAAGTACAAATCTGGAGGCATCACACT
ACCTGATTTCAAATTATACTATAAGGCCATAGTCACCAAAATGGCATGGTACTGGTATAAAAAATAGACATATAGACCAA
TGGAACAGAATAGAGAACCCTGGAGATAAACCCAAATACTTACAGCCAACTGATCTTCAACAAAGCAACAAAAACATAA
AGTGGGGAAAGGATAACCTTTTCAACAAATGGTGTGATGATATGGCTAGCCACACATAGAGAATGAAACTAGATC
CTATCTCTCACCCTATACAAAATCAACTCAAGATGGATTAAAGGCTTAAACCTAAGACGTGAAACTATGAAATTTTAG
AAGATAACTTTGGAAAAACCTTCTAGACATTGGCTTAGGCAAGGATTTTCATGACCAAGAACCCTAAAGCAATGCAAT
AAAAACAAAGATAAATAGCTGGGACCTCATTAACCTTTACGAGCTTTTGCAGGGCAAAAGGAACAGTCAGCAGAGTAAA

286/375

CAGACAACCCACAGAGTGGGAGAAAAATCTTCACAATCTATACCTCTGACAAAGGGTAGTATCCAGAATCTACAAGGAC
CCCAAACAAATCAGTAAGAAAAAACAACAATCCCATCAAAAAGTAGGCTAAGGGCATGAGTAGGCAATTCAAAAAG
AAGATATACAAATGGCAAGCAAACATATGAAAAAATGCTCAACATCACTAATGATCAAGGAAATGCAAATCAAAAACAC
AAAATGTGATACCACCGTACTTCTGCAAGAATGGCCATAATAAAAAAATTTTAAAAAACAGTAGATGTTGGCATGGAAG
GGGTGATCAGGAAACACTTCTACACTGCTGGTGGGAATGCAAACCTAGTACAGCCATTATGGGAAACAGTGTGGGGATT
CTTAAAGAACTAAAAGTAGAACTACCACTTGATCCAGCAGTCCCCTACTAGGTATCTACCCAGAGGAAAAGAAGTCAT
TATTTGAAAAAGACACTTGTACACGTATGTTTATAGCAGCACAAATTCACAATTGCAAACTGTGGAATAACCCAAATG
TCCATCAGTCAATAAGTGGATAAAGAACTGTGGTGTACAGATATATATACAATGAAATACTACACAGCTATGAAAAGG
AATGAAATTAACAGCAATTTGCAGTGACCTGGATGAGATTGGAGACTATTATTCTAAGTGAAGTAACTCAGGAATAGAAAA
GCAAAACATCATATGTTCTCACTGATATGTGGGATCTAAGCTATGAGGACACAAAGATATAAGAATGATACAATGGACTT
TGGGGACTTGGGGGGAAGAGTGGGAGGGGGGTGAGGGATAAAAGATTACAAATATGGTGCAGTGTATACTGCTTGGGTG
ATGGGTGCACCAAAAATCTCACAACATCAACCTAAAGAACTTACTTATATAACTAAATATACCACCTGTACCCTAATAAC
TTATGGAATAAAATTTTATAAAAAGTAATAGATTTAAGTCAGAAGTTTATTGAAGCAAAGTAAAGTACATTGCGAAGGG
ACCAAGTGGAAAATTTAAAAGATTGAGTGCCCCGCTTGATCATTTGGTTCAGGCTTTTATAGAGTTACTGTATCCTGAT
TCTTCTGATCTCCTCCCTCATCTTCTTGGGGGAACCTGTTGGCTAATCCTTGCATGCGCAGTAACCTTGCTAATATCT
GTCAGGGGCTGCATGTGCCGTTTGGTGGCTGAAGTTGTGTGTATGCTCTCCATGACAATTTTTCGTTACTGGTCTAGTG
CCCCCAAAGGAAGCTACATATCAGGCAAACTCTGACGTTTGGCCCTTCTTGAGCATGCTGGACATATCCCCGAAGG
AAGCCCAAACCTCGCCATTTTGGCCCTTACTGCAGATGCCCTGGTTCATGTTTGGCTTAGTTTCTGGGATCTTATGAGGAAG
TTGTTGCTCATAAGCTCAAGATGTTTCTGTTTGGGAGGAAATTTTCCCTTCTTGGTGCCAGCCATGACCATCTGTCA
TTCCCAAGGAGGCCCCTGACAATTGCATGACAGTCACCTGACTGTTGCCTGACATTCCTTGGGGCACTCTCCTACCCTG
CTCATATCTGCCTATCTGCCTAAGTAACATGAAGACATTTTAAACCTTCTCAGTGGTCTCCTCATTTCTTCTCTCTC
TCTCCCCCACTTTCCCTTCAAACCACCTCAAACCTCCTTCTATTTCTACTCAGCAAAATGGAGATTAAACCTCACTA
AAATGTGTCTTTGCCACCCCTGCCCTCCCATTTTACAGCGCACTTCTTCTTCAAACAGATTTAGATTTACAGAGGAA
AAAAGGCAGAAATTTCTTTACCGGCTTCAGACACTTAAAGAAAATCTGTCTTTTCTCATCTCTACACGTTAAATATTT
GCTATAATAAGTGTAGATTCAAGAGCCATTTGGACATATCTGGCTTTTAAATAGTGTGTGACTAATGACCAACTTAACTT
AGATCTTTGAATCTATGTGTGTTATGATATATATTAGTTTCTCATCTGAGGTCTAGCTCATAACTCCCACAGCCCTT
GTTACAGTCTTTTGTATATAATGTTGGGTGTGTTAGGCCCTCAGGGGCAGGCCCTGACCTTCTCCTTCTCTCCTTTACC
TGTTCCTGCTTTCTGATTGTGGCTTTTAAAGACCTTCCCCAGAGAGAGTACTGCCCTATACCCTGGGGGAAGGAATGCT
GATGTCATGAAGCCTCCATAAAAATCCCAGAAGGACAGGGTTCACTGAGCTTCCACATAGCTGAACACTTGGACTTTTCAT
GGAGGTTGGCACAGCCAGGTAAGGCATGGAAGCTCCACACCCCTTCCCCCATACCTCACCTATATGCATCTCTTAATC
GGTAACATTTGCAATATCCTTTATAATAAACTAGCAAACATAAGTAAAGTGTTCCTTGGGTTCTGTGAGCCACTCCAGC
AAATTAATTGAACCCAAAGAGAGGATTATGAGTATGCCAAGCTTGGAGGTGGCCGGTTAGAAGCTCCAGAGGCCACACT
TGTGACTGGTGTGGTGGGGGGCAGTCTTGGGAACCTGAACCTTCAACCGGTGGGATCTGACATTATCTCCAGGTAGACAG
CGTTGGAACCTGAATTACAGGACACCCAGCTAGTGTGGCTGCTTGGTGTGGGGGGGAAACCTCACATGTTTGTTCGTAG
AAGGCTTCACTGTGTGATTGATGATTTTGTGGTGTGAGAGTAGAGGAAAAATGCCATCAGGGAGAGTTTCTCTACACCC
TATAGCTCCTAGATGCTTTTATTTAAGACATTTCAAACCTTGTGAAAAACAAACAAACAAATCTTTTATTTAAG
ACGGTCAAACCTTGTTCAAAAACAGCACAGACATTAACCTCGGAATTTAGGATTTATTATTGATTAAATGACATTATCTTC
AGTCTGTTTCATATTATTAAGTGATATAAGTCAGGTACACACACACATGTATGGGGAGTGTGTGGGAGTGTCTGCATGAA
GTATACTGTGCAAAAATATACTCATTTCAAAGAAACACTGATTTAGGCCCTGGCAAATAAGGAAACATTTCTATTTCTT
CTAGAAAATAACACATTCATTTGCCAACATCTGATCTATCCATATGACCTCTTAATACACACATGAAAATAATAAGTGTA
TTTTTCAATTCATTTAATAAGCATGTGATTCACGTGACACTGTAAGCCTTTTTTTTTTTTTTTTTTTTTTTTGTAGACA
GACCTTTTTCTGTGCGCCAGGCTGGAGTGCAGTGGTGTGATCTCTGCTCACTGCAACCTCCACCTCCTGAGTTCAAGC
GATTCTCCTGCCTCAGCCTCCCAAGTAGCCGGGACTACAGGCACGGGACACCACGCTGGCTAATTTTTTTTGTATTTTT
TGTAAGACAGGGTTTCGCCATGTTGGCCAGACTGGTCTGAAACTCCTGACCTCAGGTGATCTGCCACCTCGGCCTCC
CAAAGTGCTGGGATTAAAGGCGTGAGCCACTGCGCTGGGGCAGCATTTTTTTTTTATTCAGTGTTTCTCGTTAATCTA
CCCCATGGCGTTTTATTTTCAAGTTGTATGTATGCCAGAGATGAAAAAAGGCAAATGACAGAAGAGCAAGTATATGGAGA
AAGATAGGAGGGACTTGAGAAAACCTTGGCAATTTACTAAAAATGAAATGGCATTTGTTTCCATATTTACAAAAACAGACA
AACAAACCTAATCATTTCTCTCATTTTGATCAGCTTTTCATGTATATTTTCTAGGCCTAATCAAAATCTTCTTTGGTGTC
ACAAAATAATGGAAGAGACATGTATTGGTTTAGGCTCCTGCAGCAGTAGACCCCAATATAAGGAATATTAGTTGTTTAT
TTAGGAAATTCAGAAACCTAAGTAAAGGAGTAGGGAAAGTGAGACAGGAAATGGAAGGATCTCTGAAAAAATACACATC
ATCAAGTCCGTTCCACAGAGGGAAACAGGAGCTCAGTCCCCATTGTTGGGTTCTGGAAGACAGTGTGGAACAGACCCC
AGAGTTATCCCAACTGTGAGATGAGGAAGCTGGGGTGCTTTTACCAACTCTTCATCCATCACCTGCTTCCGGGGGTCA
TTAACAATCCCACTCCCAGGTTATTTATGCTCAGGCCAGGCATGTAACCTGCAGCCAGAAAATAGCCCTTGCCAAGAC
TCACAGGAATAAAAACCTTCAGGCAAGGAGCTACTGGTCTTTGTAATAATAAGCTTTGAGAGGCGGGTATTTCAGAGGC
TATGGGCAACCAACTTCCCTTATGTGAGTCAATAACCAAAAGTAATTTGTTTGTGATGTGTATACAAGTATTTGA
ATGAATGCTTCTCTTTGTTTTGTGTGTTTGGAAAAATTTAAACAAAATATTATTATGTTTTGTATTTGTTTAAACATC
TGAATATGTAACATCAAAGATGATATTAATAAAGTATAAAGCAAATATACAAAATCAGATGTGCAGTTACATGTTTAC
TTGAAATTTCTCTAGACTACATTTGAAATAGGAGCTCCATAGGGGGAAATTTAAATTTTTTTTACAAGTTGTTTAAAT
TATAATGTGCTTTAAAAACACTTTAGCATATCATAAACCTTCAAAACAAAATGAGTAATCATCTTCTGAGATCCATAGA
AAATGTTTCTTAAATGTCACTTTCAATTACCACTTCTGGAGCTAACTTGCAAAACAATTTGTGTTTCCACCAACTGAAAT

287/375

ATGTTTTTACCAAATTTAAGATAATCTGTGGTCACTGTGAGCTTTGTCTTGATTTAGGAGGAGGAAAGCAAAGTTCCAT
TTATGAATACTTTGAATAATTTTCAAGAAATTTCTCTAAATTTGTTTCAAGCAACAGGCCAAAGAGAGGCTTGAATCCCA
AGGTGAGAGGAACTTTAAAGTTACACTTATGGCCAGGACGGTGGCTCACACCGTAATTCAGCACTTTGGGAGACT
GAAATGGGTGGATCACTTGAGGCCAGGAGTTCAAGACCAGCCTGGTCAACATGGTGAAACCCCATCTCTACTAAAAATA
CAAAAAATTAGCCTGGTGTGGTGGTGCATACCTGTAATCCCAGCCACTTGGCAGGCTGAGACATGAGAATCACTTGCACC
CAGGAGACAGAGGCTGCAGTGAGTGAGATCATCCCACTGCCTCAACCTAGACAACAGAGTGACACTCTGTCTCAAAA
AAAAAAAAAAAAAAAAAGTTTCACTTGTGCCTTGGGGTGGCTGCCTGCTATCATATTTTGTGTGTCTTCTTACCCC
AAGCTCCAGTACCTCCCCTCACAGAAATCACCTCTCTACCAACCCCAAGGGAACCCATTCCATTTTTATTAGAGAGTT
CTTCTTTACATGGCCTCAAGTCTTTTCACTCAAGATTTACTGATAGAATAACAGTAAATCCACATTACTCCAGGTGTCTC
TTTGCCCTTACCTAGCCTTTGTGTCTATGCCATTCTTCTCAAGGAAATTGCCTTCTTTATCAGCTTTAAAGTCCATA
TTTGGGATCCCCTCTCTGGAAACATTCTCTGACTATCCAGCCAGATAATTTTTTTTCTGTCTTCTCATTATAACA
TTCATGATCTGTGTCACTTCACTTCACTTCACTTGTGCCAATATTTCTTGAGTGCTTCTTAAGTTCAGGCACTGTTCTA
GGTACTGGGACATAGGAGGATAGAAGCCAGTCAAATTTTGCCTCACTGAAACTTTACTTTAGTAGGTAAGAATCTAT
AGTTTAAAAAAATTCACATATGAGGCCTGTGAAGCAAATAAAGCAATAATGTGGTGGTTCATGGACATTATGTCT
TTCCTACCCGTCCTCTTTTTGTGTAACTCTCTAAGGCAAGTATAACCTCATCTATACATTAGTATTTATTACCA
CAAGGACCCATAAGTATTTATTGATATATCTTCTAAGTATGTGATAATATTCTAAATAGATAGTAGATTAAATCATTG
GGATTTATGTGAAGTTGGATTAAATAGATAACATGATAATTACATTTAGTATTGCATGGAAGGACACATTTTCTCACTT
ATAGAAGCCTAAACAAATGTCAATGTTGATAGATTCTTTTATAGGATGTTAACTCTGAAGCTGTGCTGAAAAATGTGT
GAAGTGTCTCACTTTCACTTGAATCATGACAGATTTTGTCTAGCCCTTAATCTTCTGCAATCTTTGT
TGATCCCTCCTATTTCAATCTCATAAGACACTTATCTCTCTCCAGAAAGATCTGAAGGGTTAAGTCACTATTTATAC
CTAATTACAGTGAGCCCTGTGTGGATTTTTAAAGGATAAAAGGAAGTATCAGATCTCAGTTAACTTATGTACTGTCTA
CAGTGCCTAAACATGACACAGGATGACTCAGTTAAGGAGAAAAATACTCCATTTATCAGCACAGAATCTTCCCTTAA
GCTATCATATGGTGAACCTTGCCTAACCTTGCAGTTTAACTTGTCTTTTACGTGCATGCACGCGTGTGTGTGTG
TGTGTGTGTGTGTGTACTAATTTCTAAGTGTACAGCTCCTGAATTAATATTGGCAACATCAATATCTCTGTATAA
TGAAGAAGCATGGTCCAAGAGACTTGGATGTGACCTCTCTAAACATCAACTTACAGCTGCAAAAATAAGGAATAAGTTGT
AATTATCTCTTATTTGTAACAACCTTACAGTGTGTGTGTAAGATTAGAAGAGAATATATAGATGAAGTACCCAGT
GGACAGTAGGTATTGAATAAATGTTAGTTTCTTCCACCTTCTCTGGCTTATGTAACAAAATTACTCATTCTACTAGTC
ACTCAGACTTTAGTTAATCATTAGCTAAAGAGTAACAATGCAGGATTTTTTTTTTAAATAAATTGGCTAGGATTGGTTTT
ATGCCCTGGATGGAATAGGCACTTGCCATTTTATCACAATCAAATTCCTCTGAAGGCCTGAAGGCCTGAAATGTTTA
CCATTGGAACCTAATCCCACTGTATGGTTACTATTATTTATTATATCTATTAACCTTATAAAATATTAAATATAAGTA
AATATTACCCTACTGATGCATTAGCCACTCAACATAAATGAGTTTCTTGAGATTAATAAAGCAGTACATCAGTATGTC
CCAAACAATGGCTAAAAGGAAACCTAGTAACCAACCCGACCCCAAACCTTGTTTTGTTAGGCCAGTCAGATTTTTTTTTT
TCATTTTGAATTAGCATCACGATTGAAAGTGGAAAGATCTCACATATAAATTACATTTCTCTGTACAATTGAGAAACG
TTGGCTATGTTGGCTCTCTGAATAGCAGCTACCTCCTTCAAGGTTTGTATTTACAATATTTCCCAACCCCATGAGTCC
TTATTATCTTGACACTGAGGACAAATATGAGTTGCTGTCCATCAGCATTCCAAAGCTGTTTTTTTTTTGTTTTTTTTT
TCTTACACTTAGCCTACTTCACTCCCTAACACCACCAGCCTGATTTCTGAGGGGGCTGAGGTAGGAGGAGGAGAATGG
AGAGCACTTTCTCTGAGAGCCGCCATTTTAAACAGATCATTAAAGACACGATATTCACATGACGGTTGCTTACTCTCTGA
TGAAACTACAAAAACAGAATACACAGGGAAGGTAATCTGAAGGTGATACCTTTTTCTATGATCCTTGGCCTTATAAC
CACTAATCAAGCCTGAGGCGGAAGTTCTGCTCATCTGCGCTGATTTACGAACCTAGGCAGGCTAGCAGAGGCAAC
AGGCAACCTGGGCACCTGAAGAGCTACCTGGATAACCTAGAAGAACAGTAGGAGGTTAAAGATGAGGACAAGCTATCA
AAACAAAAGCCTGTCAAGACCAGAAAGAGAAAGTCACTTTTGACTTTACAGTTTGTGTGGCTGACACAAGGCCCT
CAGTTAACACCAAATACAACCTCCATAGACTTCAAGTTTCCCTCATATTTTTCTGGGTCACTATTCCAGAGTTGAGAA
ACTGAACCTACATCTAATATTTTATTAAATAAAATTGAAGATTATTAGAAAAGTTTATTAGTCAATAGTAAACGTTAT
TTGGTTAGCTTTCTTAAACAATGGCATTATATAGATATCTGATTATCCCAACAAAATCTTCAAATGGTTCATGGACGCT
TTGTCAAGCTTTTGTGCCACCTGAGAGAAAAAAGATAAATGGGGAGGTATAATGTTAATTTGTAGCCTTTGCTTAAT
GTTTATTTTTGAAATGCCTATCATTTTCTATCAGTATCTGAACTCCATGGATTTCTATTAGCCTTACCAATAATTAC
ATTTGAAAGCATCCAGAAGAGACAATCCTTACCACAGTCTCTTTTAACTCTTAATGGCTGTCAAAAATTTCTATTTT
CATTTTCTCTAAGAGCATTCTATTAACTGTTTCTAGTTATTAGCTTTTATAAAGGCACACAGAAAATGTTTCTCTAC
AGCCACAAATATTTCTAAGCAGAATCATAGTAAACAGCTGTGATAATGTTTTATTCAATCCAGAATCCTAATGATTG
AACAAAAGAGAGACAGTCTTAAGAGTTAATCTATTGAGTCCGTGACTGCGTGCATTGTTCTTTCAAGTATTTTACCT
GCATATTTAATGTAATCTCCCAGCCACTCTGATTTCACTCATTTTACAATTGAGGAGACTGAGGCATAGAAAATAA
AGCAATTTGGCTGGAGTAAGGGCCAGGTTGGGACTTATACCTTGGCGGTCTGCCTACAAGGTGTTCTCACCACCATCT
GACACTGCTTTCTCTGTGTAGCCAGAGTGTGAGCCTCAGTGCTTCAACTTGAGCTTTCAGGATCTATTTAAAGATGGA
AAATATAGTTACATTATGTCAACATTTGAGATGCAGAAAGACAGGGCCACCATTTTGCACAATTCTGAAAGCACAATTC
ATGCTGTGGTTTGTAAAAATGGTACTCCCTAGAGTTGGGCAATGGACAGCTCACACAGAGATGCAGTGGCCCTGTAAA
CTAATGCCTTACATAAAAGAGTTTACTCTTCACTCCCTTAAATGATTCTTAGTAACACTGGCTGACACACACAAAA
CAGTTTCTAAGTAGGTCTGTCCGATACATACTGCTGCTCAACATTAAGTTTCCACAATTAATTTTACATAATCCAA
AGTCTGCCAAGCAGTTTATCTGGGTAAACTATAACATTTAGTATCTGCTTCCAGTCATGCCAGCAACAGG
TTGAGAAGACAAATGTTCTCAGAAATGATCTCAAGGAGTTGGGAGCAGGCTGCTTATACGTCTAATTCACCAGAATAG
GTGAGCGTGGTCTGGTGCCTTTTCTACTGTTGAGAGCTGAGTATGAAGAGATGACTCACAGTCTTCAATGCAAC

ACAGGTGACCCTGCAGCCAGATATTTTGCCCTTCAGTGGTATGTGACTCCCATGGGGTCAGGAGAGTATCTCAGACATTGAA
ATTTGACCTAATGGCCTACCTACCTGCACACGCACCC'TGCCACTTACAGAAGGGCAAGAACTCTGCAATTACTGAGGCC
TTGTTATTATTATAGTTCCATTTTAGGTAAGAACGCAATGGAGAAAAAATGCATTTGGTTATTGGGCCCTCTGTTTGAAT
ATCCTGTGCTTTTTTGCCAAACAATGCATTCTACATAATCTTAAAAACAAGTCCATTTCAAAGAACAAAAATAATGAC
CATATCCACTGAGCAATTGAGCAGAATGGGAATCGGAGTTTTAAACTCTGATATATCTGTTTTCCTTAGGGCTGAAATC
TCTTTTTCATGGTTCTAGTTTTCTCTAATTGAAATAAGAACC'TAACCTGTTCAAAAC'TACATCTCTGGGAATGAGTGAA
AAATTAATGATCCTCCTATTTTGTGGATCATAATAATGACTCTCATCTGGTGGGGCCACCAGCAATGCTATTCTTCT
CAGACTCTATCTTAGTTCC'TAAGCCACTCACCAGGTATTTAAAAGAATGATTTAACACAAC'TAGAATCATTTAAATAAC
TGTAATTTTTTAAAGAAAGCCATATTATTGCTTTTAGTTTGGTCA'TTCATATATCCAAACC'TTGACTCATCATCTTGCAAT
CTCATGTGTTCAGT'TATTCAGAGAAAAACATTAAGGAGAA'TTGTAATCTTCTTCCCAGCTAAATTTTAGGTCC'TCAAAG
CTGGCAACCACAATTTATGCTTTCTAAAAATCATCTATGATACTAAGTATGAGCTGGATCATGAATAAAACCC'TTGTA
CAATAAATGCTTGATGACTTACTTCATCTCATTAGCAAGGGAAGGTAAC'TATAAT'TATCAAGGTACTACAGGAAATAG
GGC'ACTATCTGGAAATGCTAAATACATCTCCTTGTCATGAATCACTTCTTACCAGAA'TCCCTTTCTTTCCAGATCCCAC
CTCCAGGGTCTGTGGTCCATACCAGGCACATCTCCTCAGGGGCTACAGCC'TATGAGCGTCTCATGGGGCTATGAAA
CCATTTTGAGACTCTGGAAAATGAAGTAATTGAATACAAACAGAAAAC'TGCAAAATGAGGACTAACCATTTAAATTAATGTT
CAAAGCATAAGATTATGTCGACTTCAATAATTGTCAAATGAGTATTCTTAACATTTTACTAAATTTAAAAAACCTTATGT
GCTGAGTTTTTTTTATTTTTACAAGTATCTCCAAGTATGCTGGATGATTGCAAAGAAAATCAAGGCCAGTCA'TTGGTTAAAT
GAGTTTAAATAGTAGCCACATAA'TTCAAAGCAAAATTTATAAAGACCC'TTCCCAGACTGTTGATAGCAAAAATAATCTA
CGTTGTGGAAAGTGGGTCCATGTTAATA'TGTTAGATATAAGTAGTGAGGCC'TAAAAAGGTATTTAAACATCTTTGCTTA
AGGTACTACC'TATTTGCAAGATTGTTATTTTAAAAATAGCTTATGTTTTAAATTGTTATTGCTTTTTATCACTCTAATA
AGAA'TTTATAGTTGCTGTGAAGATAACAAGAAAAAGGTTAACTATCTGCAGAGATGCC'TGAGAGTCAGCCAGGGAGTAAC
TTAAATCCTGCAGGAATCTGACTCAC'TGAAGACTGTCAACTGAATGAAGGC'TTAAATTTCATGGTCTTGGGTGGGAGAA
CTTTTTTCATATTTCTTTCCCATATGGAATAACAATCTGCCCTGAAAACAGGGAGTATTTTGGCATGATCTCTTTTTTGCT
TATTTGCCCTTCCATTTTCCATAAAGCAAC'TTTTGCCAAGCACCATAC'TTAAGACTCAACTTTTTTGCAAAAATATCAGA
CAAAGCACTGCTCTTTAAGAACACAGAGAACACACTAGATCCC'TTCTTCTGAAAATCACTGTTCTATGTTGTTTGTGGAT
ATTTTTTTTAGCATTCACTG'CATGCC'TGGAATGAATAGGCTGTGTTTCTCCCCAAAAGAGCACAAATTAATATACAAGGT
CAGGTTAAATAGTTAAGTCTGCTTTCC'TATCCCTTATACAGAAGCTATCCATTCAAAAAAAAAAAAAAAAAAACTTCTTT
TTACTTTTTTTTAAATTTTTTAAATTTTTGGTGCATACATAGCTAGGTGATATATTTTGTGGAATACATACAAAACATCAATGCA
TAATAATC'CATCATCTGGTAAATGGGTATG'CATACCTCAGCTAAGCATTTTATCTTTTATGTTTACAAAACATCCAAATTT
ACCCTATAA'TTGC'TTAAAAAACATACAATAAATTTGTTAACTATAGTACCCTGTTGTACTATCAAATATTAGCTCTTAT
TGATTCTATCTAAT'TACATTTTTTTTATACCCGCTAAGTATCCCACCC'TTCCCTCCACGCTACCCTACCTAACCTCCGGA
AACTGTCTTCTGCTCTCTATCTCCTTCTGTTTGTTTTAAATTTTTAGCTCCACAAAAAGGGAGAACATGTGAAGTTTGTG
TTTCTGTGAGTAAC'TTATTTACCTAACATAATTATCTCCACTTCCATCCGTATTGTTGCAGATGACAGGACCTCATTC
TTTTTTATGGCTAAATAGTACTACAT'TATATATATGCACCATATTTTTCTTTATCTATTTGCCTGTTGATAGAAAATTAG
ATTGCTTCCAAATCCTGGCTATTGTTAATAGTGTGCAATAAACATGGGAGTATAGATAACTCTTTGATATTTTGACTT
TCTTTCTTTTGGGTATGTACTTAGCAGTGGGATTGCTAGATCATATGGTAGCTCTATTTTATAGTCTTTTGAGGAGTCTT
CAAAC'TGTTCTCCATAGTGGTTGTACTAATTTACAT'TCCCATCAAAGGTGTACCAGGGTTCCTTTTCTTTACATCCTC
ACCAGCATTTC'TTATTTATTTGTCTTTTGCATAAAAAGCCATTTTAGCTGGAGTGAGATGACATCTCACAATAGTTTGTAT
TTGCATTTCTCTGACGATCAATGATGTTGAGCACCTTTTCATATACTTGTTTACCATTTTTATGTCTTCTTTTGAGAAA
TGTGTGTTTCAGATGTTTTGCC'TATTTTTTAAATCAGATTAATTTTTTCCCTGTAGAGTTGTTGAGCTTCTTATATATTCT
GATTATTAATCCCTTGT'CATGGATAGTTTGCAAAATTTTCCCTCCCATTAATGTGGGTGTCTCTTCACTTTGTCAATT
GTTCC'TTGTGCTGTG'CAGAAGCTTTTTTAAATTTGATGTGATCCTATTGTGCCACTTTGTCCATTTTGTCTTTTGGTTGCCTA
TGCTTGTAGGTTATTACTTAAGAAATTTGTTACCAGTCCAATGTTCTAGAGACTTCTTCAATGTTTCTTTTAGTAGT
TTCATAGTTTCAGAGTCTTTAGACTTAAAGTCTTTTCATCCATTTTGA'CTTGATTTTGTATATGGCAAAAGATAGAAGTCTA
GTTTCTCTTCTCTG'CATGTGGATATCCAGTTTTTCCAGCACCATTTATTAAGGAGACTGTCTTTTCCCAAAGTATATAC
TTGGCGCCTTTGTTGAAAATGAGTTCGCTGTAGATGTATGGATTCA'TTCTGGGTTCAAAC'TGGTATTCCAGTTTTGT
TCTTTTGTCTCGGGATACC'TTGGCTATTTTGA'GTCTTTTATAGTTTCATATAAAATTTTAGGATTTTTTTTCTATTTCT
GGGAAGAAATGTCCTTGGTATTTTTTATAGGGACTACAT'TGAATCTGTAGATTGCTTTGGGTAGTATGAACGTTTAAACA
TATTGATCCTTCCAA'TTCATGAATGTGGAATATCTTTCCATTTTTTTGTGTTCTCTTTTTTCCATTAGTATTTGATAG
TTGATAGATCAT'TGTAGACTTTTTTGGTTT'TAGTTAACCTAGGTACTTAATTTTATTTGTACCTATTGCAAAATGGGATT
ACTTTCTCCATTTCTTTTTT'GAGTTGTTCACTGTTGGCATGTAGAAATGCTACTAATTTTTGTATGTTTGT'TTTGTATC
CTACAAC'TTTGCTGAATTTATTTATCAGTTCTAATAGTGT'TTGGTGGAACTTTCAGGTTTTTCCAAATTTAAGATCAT
ATTTTCTGCAAAATGGGATAA'TTGGCCTTCTTCCCTTTCAAATTTCTTTCTTTGGTCTGATTGTTCTAGCAAGGACTTCCA
GTATTTATTAATATATATTGAATAC'TAGTGGTGAAAGTGGGCATCCTTATCTTGTCCCACCTCTTGGAAGAAGAGTCTTCAG
TTATACCC'TATTCA'GTATGATACCAGCTGTGAGTCTGTTATATATGACTTTTATTGTGTTGAGGTATTTTCTTTTATAC
CCGATTTTTTGGAGATTTTTTATCATGAAGGATGTTGAATTTTATCAAATGCTTATTCA'GCATCTGTTGAAATGGTCAT
ATGGTTTTTGTCTTCTTCTTCTTTTAGTAAAAGTGAATTTTCTCTGGTGGCGTGT'TTAAATTTTTTGTCTTTTTATT
TTTTGAGAACCCTGTTGATATTTTTTGA'TTTTGGATATACCAGGAGCTTGAAATAATATTTGTAAC'TCATTTATTTA
AACTGATGAACAACATTTAAACATGATTGCATTAACAAACCTAAACAAGCAAGGGAAAACCAATAAAAACTCTACATTTTAA
TTTGTCCCGCTTTTAAACCTTCTGTTGTCTTTTATATCTTATTGTATTGTCTGTATTTCAAATAATAGTTGTAGTTAT

Fig. 6.283

289/375

TATTTTGTATCAGTTTATCTTTTATCTTTCTATTTAAGATATGAGTTGTTTACATACTATAATAACAGTGTTATAATA
TTCTGTGTTTTCTGTGTATTTACTAATGCTAGTGAGCTTTGTTCCCTCCAGATGATTTCTTATTGCTCATTAAATATGCT
TTTCTTTTCAGATTGAAGAGAATCTTTTAGCAITTTCTTACAGGATAGGCTGGTGTGATGACATCCCTCAGCTTTTGT
TGTTTGGGAAAGTCTTGATTTCTCCATGTTTGGAGAAATATTTTACAGGATATACTAGCCTGAGATAAAAGTTTTTTTC
CCTTTAGCACTGTGAATATGTCTCTGCCCCATATAAGGTTTCCACTGAGAAGTCTGCTGCCAGATATATTGGAAGTCCAG
TGTATGTTTTTTCTTTATTTTTTTCTTGCCGCTTTTTCAGATTTCTTTCTTATCTTTGACCTTTGTGAGTTTGAGTATTGAA
TGCCCTTGAGCTAGTCTTCTTTGGGTTATATCTGCTTGGTGTCTATAACCTTATTATACTTGAATATTGTTATATTCT
CTAGGTTTAGGAAGGTCTCTGTTATTTTCCCTTTGAATAAATTTTCTACCCCCATCTCTCTTTCTAAGTTTTTTTAAAG
GTCAATAACTCTTAGATTTGCCCTTTTGAGACTATTTTCTAAGTCTTCTAGGAATGCCTCTTTCTTTTTTATTATTTTT
TCTTTTGTCTTCTCTTTGTATTTTCAAGTAGGCTGTCTTCAAGCTCACAGTTCTTTCTTCTGCTTGATTGTTTTGTGCT
GTTAAGAGACTCTGAGACATTTTTCAGTATGTCTGCTGCTGTTTTAACTCCAGAATTTCCGCTTGATTCTTTTAAAT
ATTTTAACTCTTTGTTGAATTTATCTGATAGGATCTGAATTCCTTCTGTGTGTTATCTTGAATTCATTGAGTTTCC
TCTGTCTAAAGGTACATATCTCTGTCTCTCCAGGACTGGTCACTGATGCCTTATTTAGTTTGTGTTGGTGATGTCATG
TTTTCTGGATAGGCTTTATGCTTGTGGATGTTCTGTTGTCTGGGCATTGAAGAGTTGGGTATTTATTGTAGCCTTG
CAGTCTGGGCTTGTGTTGACCTGTCTTCTTGGTGAGGCTTTCCAGATGCTTGAAGAACTTGGGTGTTGTGGTCTGAG
TTTTGGGTCACTGCAGGAATATCTGCATTAGGGAGCACTCCAAGCCAGTAACACTGTGGCTCTTGCAGAGGTACCACC
TTAGTAGTCTTGGATAATATCCAGAGTCAATCTCTGGATTACCAGGCAGAGACTCTTTTTTCTCTTCTCTTACTTTCTC
CCAAACAAACAGATTCAGTCTCAGTCTGTCTGTCTGTCTGTCTCTCTCTCTCTCTCTGTGTGTGTCTCTGTTT
CCTGGATCTGGGGGAGGGGTAACACAAATACCCCTGTGGCCACCACCAC'TGGGACTGCATAGGGTCAGACCTGAAGCCA
GCATAGCACTGGGTCTTGCCCAAAGCCTGCAGTAACCACTGCTTGGCTCCTGCCTATGTTTGTCTCAAGGCAC'TAGGGCT
CTATAATCAGCAGGTGGTAAAGCCAGCCAGGCTTGATCCTTCCCTTCAAGACAAC'TAGTTCCCTCTAGTCC'TGGGCAG
GTCTAGAGATGACGTCCAGGAGCCAGGGCCTGGAGTCAGAAATCTTAGGAATCTACCGGTACTCTATTC'TACGGTGGGT
GAGCTGGCACCACCAAGTACAAGACAAAGTCTTCCCACTCTTCTTCTCTTCCACAAGCAGAGGAGTCTCTCCCTGT
GGCCACCAC'TGCCCCAGGCTGCGACAAGTACTGTCTGGCTACTGCTGATGTTTCAATCAAGGCCAGGGGCTCTTCAAT
CAGCTTGTGGTGAATGCTGCCAGGCTTAGGAATCTATTTTGGGGCAGTGGGCCACCTGTAAGCCAGGGAAGTCCAGA
AATACCATCTAAAGCCAAGCCCTGGAATCAGGAACCCCTAGAACCCTTTTGGTGTCTTTACCCTGTCTGTGGCTAAGCTGG
TACCTAAGCTGATTTTTTGGTCTTATGAAGGTGCATGAAGGTGCTTTTTTGTGTGGAGAGTTGTTCAATTTGTTGTTCC
TTTGGGAGGCTGCTATTTAGCCATATGGCTCCACCTCCCTCTCCATCCAAAAAGAAAAC'TTTAAATGAAAATATACATC
CAAAGAAAGTGTTTTTGAAATAAAAAATAAATGGTCTTAATTCAGGAAGAAACCAACATAGTAAAGTAAAAATGCAT
TTTTTCCAAAGTTACTTGTGTTGATCACATATTGATTTTATTTTAAATGAAATATCTAGAATAGGTAAATCCATAGAGA
ATACAAAACAGGTTAGTAGTTGCCAGGGAATGTGAGTGTGCAGAAATGAGGAGTCATTGCTTAATGGCACTGTTTTCAAG
AGTTACTTTTGAGTACACTTGCAGTCTGGTATCTAAATAATTGAAATATTTGAAAGTCGTGATTCTTAGAATAAAAAACA
GTGACTAACTTTTAATGATTTCAATGTCTATGTCACAAAAAACCATGTCCAGAGTAATAAGTTTACCCATTCTACCAT
TCTTTTCAAAGAATTGCTTAAATAAGTTTAAAAAAATTTCTTATGAGATGTTACTTAAATAACGATTTGTTTAGTTCT
CAAGGTTATGCTTTCCCCAGGTTATGCTTCATTTGGGTAATCTAAGTTTAAAGTCTAATGTAAGACCTAGGGCATGGTA
CTTAACCTTCTGTAGACCTCAGTTTTCTTGACTGTGTGGTGGAAAGAAATAATAGTACCTAGCTTGTGAGTTTGTTTTTAA
ATGTTAAATGAGAGAACATGTGGAACATCTTACCCAGTGCCTGGCACATGGTGAGCAATCAATAAATGGGAGTTTCATCC
TGTCATCTTCAGATTTCTTCTTGAGCCAGCCAGGCTTGAGTTCTGACCTGGTTCATCCACTGAACCTGTAGGGGAAG
CACTTAGTGCCCTTCGGTCTCTCATCCAGTACATGGATATACAGTCTTCATGTGGTTGATACAAATACGAATGTGCTA
ATGCATCTTTACCAAAAAGAGAGGTAAGAAAGGAAGGATAATCCTGCCAGAGATACATATGCAAGATCTGAAAGTA
ATCGAGAGTGGGGGTTGCAGATTGGACAACACTAGTAGTGGCTCCAGATAAGGTTCTTAAAGACTGGCCAGGATGCA
GCCTTTTTCATCCAGAGAAACAGCCATCTCAITTCATAGCAGTGGGTGAGTGTGGCAGATTTTATAAGATGACACAAAC
ACCCTCCCCATTGTCTGCCAAAATGTGGGGAAGTCTTCTTGGAAAAGTTATTTCTTTGAATTTGAGCTTCCAAAAGGT
TCCTATTAGAATTCAAATACTCTGTCTGGGTTGAATATCACATTGCATAATAGTTTCTCCAGATTAAGGCCATTTTCC
TAAATATTTAACAAAAAATTTTTGCTTCTTATCAATGATGCTGGCGTTGGTTCAGTGCCTGCATAAGACTTCTTCCAG
TGTATTTCTTTACCCTGGCAACCAGTTCCTTTTTCTTTGGGAGAATTTTTTTTTTAAATTATAACACTATTGTAGGAACT
CCTTTTTTGGCACAGAAGGCATCTAAAGTAACTTTTAGAGATAGAGGCTTATGAAAAACAAGAAAGAGGCAAGACTCAGT
TTTTGAAATCTAATTCAGCCATGAAGCAAATGCCACAAAAGGGCACAGGAAGAAATCTGTAAAGGGCTTATCTACCA
CCGTTGACCAAAGATTTATTCTGCTGTTAAGCAAATACCTTGTAAAGCCAGATATTGTGCTAGGTATTCTGAATACAAAG
ATGCAGAAGCCTCATTCCCTGTTTTCTTTTTTTTTTTTTTTTATTATACTTTAAGTTTTAGGGTACATGTGCACATTGTG
CAGGTTAGTTACATATGTATACATGTGCCATGCTGGTGCAGTGCACCCACTAACGCGTCATCTAGCATTAGGTATATCT
CCCAATGCTATCCCTCCCCCTCCCCCACCACAGTCCCCAGAGTGTGATATCCCCCTTCTGTGTCCATGTGA
TCTCATTGTTCAATTTCCACCTATGAGTGAGAATATGCGGTGTTTTGGTTTTTTGTTCTTGCATAGTTTACTGAGAATG
ATGGTTTTCCAATTTTCATCCATGTCCCTACAAAGGACATGAACCTCATATTTTTTATGGCTGCATAGTATTCCATGGTGT
ATATGTGCCACATTTTCTTAATCCAGTCTATCATTGTTGGACATTTGGGTTGGTTCCAAGTCTTTGCTATTGTGAATAA
TGCCGCAATAAACATACATGTGCATGTGTCTTTATAGCAGCATGATTTATAGTCATTTGGGTATATACCCAGTAATGGG
ATGGCTGGGTCAAATGGTATTTCTAGTTCTAGATCCCTGAGGAATCGCCACACTGACTTCCACAATGGTTGAACTAGTT
TACAGTCCCACCAACAGTGTAAGGAGTTCCTATTTCTCCACATCCTCTCCAGCACCTGTTGTTTCTGACTTTTTAAT
GATTGCCATTCTAAGTGGTGTGAGATGATATCTCATAGTGGTTTTGATTTGCATTTCTCTGATGAACAGACACTTCTCA
AAAGAAGACATTTATGCAGCCAAAAACACATGAAAAATGCTCATCATCATTCCTGTTTTCAAAGAACTCACAGCA

Fig. 6.285.

TTATGGAGGCCCCAGGTTTCTATTTTGGCCCTCCATAATGCCTTTGTGCTCTACCAAGAATGGTAAACAATCCCTTTCCAGT
AGGAGTTCCTAGTTAGTGGCTTATAGTTAACCAAATGAAGAGAGGATGACCATATGGTGTGATGATAAAATGAAAGAAAT
AGGATGAACATCTAGAGATTTGCATGGCCAGACACCTAATTCAGATTGCAGAGCAGCAGGATGGGAGGCGTAGTCTCTGA
TTTAACTCTTGATCAAAAAGAGGGGTAAAAGAAAAGAAAGATAATCCTGCCAGAAATGCGTGTGCAAAGATCTGAAAGT
GATCAAGAGCAAGGGATTGCAGATTGGACAGCATGTTTTCTCATTTAATCCCAGAGGAACCTGGGAGGATTCTAGGTG
TGCATATTGTCCTTATTTTGTAGAAGAAGGTAATCTTAAAGAGATAATGTGTTTTCAAAGCTTACAGAGTCCAAA
TCGATAGCTAAACAGTGTCTGTGGGATTTGAATCCCCCTGTGATGTTCACTGTGTGTTGCCATATACTGCAAATGTGTT
ATAAAAATAATAATTATAATAAACAAAATTAACCTGAGATATTTCCAGATTGAATCAATCCAAGGAGACTGAACTTCTGA
GTTTGTCTTGAGGTTAGTTGGGCTTTACTGCTACTTATGCTAGATCTTGAAGGCAGAGTAGGAAATATACTTAGCAGGG
AAGTGGGAGAAAAGGTGAGAGGTTCCCCAGGCAGGGGAAACAAAGTGAGCAGATTTGGGGCAAGGTGTGTGAGATTGTGT
GGTTGGCAATATAGGGTGGGAAAAATTAGTTATCAAGGGCAAAGCTGAATAGCAGATTGAACCCAAATGGTAGAAGTTT
TTATTTAACACACAAAAAGGCTGAAATTGATCCTGTAAGGAATATGAAGCTATAGAAGGTTTTTTCATCAGAGGCTTTG
ACATTTTAAGGTTTGTATCTTTGAAAGATAATCCAAAGATAAGAGAAAAAACCTTAGATGTGTAAAATAGAAGTCAGG
AAAACACACAAGCTATGTGTAAAGGGAGTCAAGGGGACAGGATCCAAAGGAAGACAAAAGCACAAACCAATTATTTTA
AATCAAATACTAGTGCAGTAACATATATTTTTAAGTTTTAAAGCTGCTTTTCTCCATAGCTTATTGATTACTCTTTTAA
AACTTATTTTAAATAGCAGATATTATTTATTTGATTCCCTTACCATTTTCTAGATACTTTGCTAAGGTTTTACATGTCTTT
TTTAGTCTCTCAGAAAAATCTCTTCTATCTCCATTTTATAGCTGAGGAACTGAAGCCAGGGAAGGTTAAATAATTTGTT
TGCAATCAAAACAACCTAGTGATTTGTTGGAATTTGGATTGTGCAACAGGCAGCTGACTCCAAGGCCCTCTTCTTAACTTG
ATCCTACATACCCCTTCTCAAATAGTAGGCGTTTCTTCTCAGAGCAGCTGTTTTACATTATAGAGAAAACTTATTTGTAATCT
GTGATCAAGGAGAAAACCTGCCTGAGTTGCCTGGATTATTTTGGCATTTTTTAATATTAGAGAAAAATGTTATCAAATAA
ATGTAAATTTAAAGGTCCTGATGAGAGTTTACTTTCTAATAAAACAATTTTCAACATTTCCCATTTACATCAGAAACTAA
ATTATTATTTAAACACATCTTGTGTTTCATTTATTTTTTGACAGGCTGCTTTTCCATCTTTTTTTTTTTTTTTTTTTTT
TTTGAGCTGGAGTTTCACTCTTGTGCGCCAGGTTGGAGTCCAATGACACGATCTCGGCTCACTGCAACCTCCTCCTCCC
AAGTTGAAGCAATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGTGCTCGCCACCACACCAGCTAAGTTTT
GTATTTTTTTTAGTAGAGACGGGGTTTACCATGTTTGCCAGGCTGGTCTCAAACCTCTGACCTCAGGTGATCCACCCGT
CTCGGCCTCCCAAAGTGCTGGGATTATAGGCATGAGCCACCGCGCGCAGCCTCCAATCTTATTTAATGAAAACTCAA
TTTATCTCAGTGTTAGAAAACCTAGGGCTTCATTTGGCAATGTGGTCTTTCCAGTTGTTTCATCTCTTCAAAGTCTTTT
AAGAATTATTGAAGTAAGTTAATTTTAAATTTTTGCTTTATCCCTTGAGATTGGTATATAGAGTTAGGAACTACTTGAT
TAAATACAGGAAGCTACTATAAAATTTGAAATAAGAACTAAAAGTTATAATGTGACCAGACTGGGTAAGCACTGATAACAT
TTGTATATATTTAAACAGAAAAAAATAGTTAGAAGAATAATTTTTAAAAACACACACCAGATGTTGGTAAAGGCAAAG
ATATTTTGTCTCTTGACTTTGTCTATGAAAGTCAAGTGAATACTTTGAAAGAATTGATGATGGATAAGGCAAGTACATT
GATTTCTCAAGGTGTGAATTTGTTATCTTCAAACCTTTGTGCTTCCATAATTGTTTTTCTTTAATAATGAGACATCTAGA
CCATAACTGGCTATGTGATTCTGAATCTACCTTTTACAACCTTAATCTTTGTGATTCCCCTATATAAGATATCTAGAGTAG
TCAAATTCATACGGACAGAAAGCCAAATGGTGCTTGTGAGGGCTGGGAGAAGAGGAGAATAGGAAGTTACTATTAATG
AGTACAGGGTTGTGCGATTTGGAAGGATGAAAAAGTTCTGGAGATGGATGGAGATAATCGTTGTGCAACAGGGGGGAATAT
ACATTACACCCTGATCAGTATACTTAGAAAGGGTTAAAATGTCAATTTTACGTGATGTGATTTTTACCATAATAAAAA
ATACTTAATATTTACCTATGCTTAGAGAGAGTTGCATATATAGTCATTTGATAAAATAAAATTTGAAATTCGCTATGCTTA
GATAAACATAGAAAATTTGTTTTAAAGTAGAAGTTATAGATTTCTAGCTTTAAAACCTGTGGAGAAACAATCTTCTTATGC
CATTTTTTTTCTTTAAAAGTCACTCAAACCAATAATTAGTACAAAAAACAGAAAGGTACATTTTCATCTTTGAGGAACT
GGGAGATGTCTGTGACTCTAAGCCACAATACATAAAGATAGAAGTAGGAAGAGAAAAGGTCAATGACTTTAACCAAATCA
GAGAACAATACTAAAGTGAAGCAAACCTGAGCTGCCCCAGTCGCCCAAAACATACTTTGGAAGATGGAAGAGTTCTAAAT
ATAGCAGGTGTATGAACATGTATATTATATACACTTCTCCATAAGCCCTCACTCTTTTTTCAGTGTAGTCAACATATTTT
GCATCCCTCTCCATGGAAGACAGAGACTTTGGGATACTAAGCAAAGAGTAGGAGAAGGATGGCTGTATGTTTAACTTTA
TTTAGGACAATTAAATGAATGTCTGCAATGTGTGAGTAAGACCTTCAGCGTCTTCTCTTACCCACACCAGAATGCTAG
GAAGCATATTTATATCCTTCTCTAGAAAAATAGAGATACCCAGAGGAAAAATCTCTTACAAATAGTAACATTTGGAA
GAGGCAAAAAAATCCCCACTGGGCACTTGATGATCTGCAGTAAAACCTCCAGTACACAAGCCTCACCCATGCACCTTA
GAACCTTACTGTACCTTTCTAGGGTCTCATTTCTGTGTATGAATTGGGATCAGGAATCAATGCTGGAGTTTGAGGATAT
TACACTCATTTGCTCTTTGTTTACATTATTTACATGTATTTCTTTAATAAAATTTAAATATTTAATTCAAATAATGTTA
AATTTGCAGAGATTCATTTAAGTTTAGAATAAAGAAGAACAAGAAATGTGAAAGAGGGACAGAGGAGAGGCAGAAATGC
AAAGGAAATACAGCAGCATTTAGAAAATTTTAAATTAGATAGTTTTTCTTCTGAAATCCAGTATTGAATTAGTGCAAAA
TTCTGAAAGTCAATTACAAAATTCATTTTATGTCAACATTACTGACTCCATGCACAAATGTTTATTCTAGTTTTAAAA
CTAGTATTCTGTACCTTTTTAATAGCCAATGTAAATTTGTTGACAAATATTGAAATTTATACGTTACCAGAGGTCTCACGT
ATTGTTACCTTTTTAAATGATCATTTTATTAACAGTATTTGCTTAATGAGGCAATCAAATGTCATCTGTTGCATAGGTA
ACAGGAAAACCTACCATTACTCATGTTGTGAGATGGTCAAAGACCTTATCATATTTTATGGCTAACAAAACCTCATGATGTTG
TCATATATGCCCTCATCACAGTGTATTATGATACCTAAAAGTTAGTGCCTAATAAATAGAAACAAGGACAGTGAAGTTAG
ATTGTTTAAATCCTGCATATCTTAAAGATCTAACATTTTCTAGCTGTTAAATATGTTTATCATTTACTAGTAATGTACG
TGCACCATTTTTATTATATTAAATTCATTGCCACTGTACAACATAAGAGGATGGATGAAATTTTAAAAACCTTCCAAAAAC
TGGTAGCATTTTTTAATCTCTTTCTCTTCTCTTCTTCTTCTGCTTCCACACACACACACACACACACAAACACACAT
ACACATACATACATGCACACATACACATCATGAAGAGCAAGCTTTGGAATGAAATATACCTGGGTCCAAAAATTTTGAA
CAAATGTTGACTTTCTTTATGTATGAAATTAATTATTATCACATCTACTTTGGAGGGATGTTGTGATGTATAATTAAGA

291/375

AAGTATAGTCTACTTAGCATGTAGGTAATTAATAATTAGTAGTTATTATTATTATCCTAACCTGACAGTTTATGAAAGA
GGTAGGAAATCTGAAGATAGGAAAGCCTTCAAATATAATACTCCGGACTTCTCCTTTGGGAATTAAGAAATGTAGCTC
CAAGCAAGGTTTCATGCCAGTAGGAAAGTCCTTGAATCCAACCTGTATTCCCTAGTAAGTGTAATAAAATAAAAGAAACCTC
TAGAAATTCGCTCAAAATTTCCCTCCAGATAAGGAAAATAACACAATATTTCTCAATAATGAGGAACTGCTACAGGAGT
TCAGTGTCTTATTCTCATTAACTGTTAGAGTACAATAGAGAAATAGCAGGAACTGTAAAACTGCAGTCCCCTGGTCTTT
TTTTCTAAAAAGTTAGTTTGACATATCTGGAGTACTGAATTTTCAGCATATTTGAGAGGCCTGAATATTTAGTTGATATA
TAATATGGCTCTAAGAAATATGCTCATGATAGATTGGAAAGTATAGAATATCTATTGTAATCTGAAATAGGAATTTAG
AGAACAGAAGATTTGATAGTAGGCAGAGTATTTGAAAATAGTAATACTTGAGAAAACCTGAGTTGTATAGTAAAATTAC
TCCGTAAACACCTCATTGAGTTGGCTTCATTTAATGTTTAATGTTTAATCCATGGATAAATGTCTATAAGTCTCACAAGTC
ACGCTCACCATTGGATGATAAGAGAAAAGGAGATCACATTTTAGGTGCGCACAACTCTACCTGTATGCAATTGACGCTTT
CCATGTAAGTGTGCGCAAGTTGTATCGGGGCACCAATTAGTGGTATGAGACAGACTTTAGGAGTTATTTTGGACTCCTTT
TTTTCTATTAATAATATCTTATATTTTGGGGGCAAATTATACCAGTATATTAATCTATTTACAGAATAAATATAAAGTT
ACCTTTTATATTGAGTTTAAAGTTTTTTTAAAAAGTGAGTCAATTAAGAAAAATATCAAATCATGGTATAGATGGAATGC
TAATATGGAAAGAATTATGAAGGTGGTGTATGACTGAAGTTTCAGAAACATCAAATGACATAGTCATTTGATTCAACA
AAACATCTACAGATGGATGACCCAAATGGATGTATACATCTATGGTACAGTCTATTGAAATGTGGTAAACAACCAGAAAGT
AAAAGGTCCATACATTATACAATTCAGTACAACAGGGAAATACTGAGAAATAATCGCAGCTTCTGGATCAAAGCATGG
GCCACATGGTTCCTAAATCCAGTCTCCCATATTCAGGCCCTCCTCATCAGCCTGCATGCCATCATATGCTTGATGCTA
ACAGGAATTTTCAGGGGAAATGCCATATCTTTCCATTTGGGGGAAGCTTTTCAGAGGGGAAACTACAGGATGCTTAGATA
ACAAAACATTTCTTTCAGAAATGTTTCATGTGAGAAATGGTCTTACAAGTGGATAAACTCTGTAACATCAAATACATACT
TTTTTTTTATTCTGTCACTACCTTAAATATTAGGAGTAGAAGCAAACTTAAATTTAAATCTCAATGGTCTTACAACAT
AGCGCATCTTTCTCTGTATAGGCAACCTTGATGTACCAATCCAAAACCTTTGAGTATTCTGGTTAGTTCCATACA
TTGTGAGATTTCCCACTTAAAGTTTGTCTTGGCAGGGGAGAGGACGATTTCTTAGTCATTATGGTACTATTATACAGT
CTTTAGTAGATGCCCAATAAGTGTGTAGGTTTTTCAGAGAAAGATTTCTTGGAGATGTAGAATGTTGGGCAAGTAAGCA
AGGAACAGCACATGGGGCTGCACTAAACTTGTGTGTGTGTGACAGAGAAGGGAGTAGCATCAGGCTAAATAGCTCATT
GTAACATGGATCTGGGGGACGGTAGAACACAGGCTAATTTATTTCTGGAGAGTTGAAAACCTCAACAGTCAGACATTACAT
TCTCTGATCATTGTCTTTGCTTTCTGAAATGGCAACTGGAAGCTATTTGGTAGACCTTACATGGAGGGAAACAGTGT
CAAATAAATAGTAGTTGCCATAATTTTACTTGGTTTGTCTTTTGTCTTTTCTTTTCCACATTTAAATTTCCAATAAGAAAA
AAATTAACCTCTTCTCTAAATCCCTCTCCCTTAAAAATAATTAGTCTCACAAAACCTTTTAAAGTTTCCAAAAAATA
CATGATTAATTAACCTGCTTTAAATGCCAGCAATATACTAGACATGGGACAGTGCTAAGAAAGTGTGAATGTCCCTG
GCAGTCATAAGGAACTGAAAAGCTTAAGGGGATAACTATGTGGAAGCAATTTATTGGCATTACCGTAAGAGGCCTG
AGAGTCATTGAAAGAAGACTAAGTCACAAATGCACCTTGAAGTGTGACCAGGGGAGCAGATGAAGGGTTTGTGTGAAGA
AGCAGCCAGAGCCTCTGGCGGATGCCGTACTACATTTTCCAAGTTGTTTGGGTGGGTCACAACTGCACCTCCAACATCCT
GTCTGCAAAATGCTAAATAAACACCAAGTTCACGTCAGACTAGAGAAACCAACGTACTAGCTAATGCCATTTAAGCAATCA
GAATGCTTACATTATTTTCACTTGGTAATTCACATCCAAAATAATTGAAGTTGGCACACCCAGAGGAGTATATATCCTC
TGTGTAGATGTTTCAGAGAGATAGGCAGGCTGGTCAACTGTTCTTCTGTTGGGAGCAATTGGAATCAGCTTAGATTATA
TCTACTGTAATAGAAAATATTTTATATTTAGGAGGTGGGAAAGGTTTTGGCCTTCGAAATAATAAGAGATATTGACAAG
ATATAAAGCTTCATTCTTACTGAAGAGCTGTTAAGGATTAGCAAACCCAAGTCTTTGTGTGTAGAGATGAATGAAAT
TGCAATTTTAAAAAATAAGGTTTAGAAAAACATTGTGCAAGGGAAACAGCCTTAATACGTGCAGCCACTTGTCCA
GGAATAATACATTTCAATTTTTCAGTTTAAATTTCCAGTATGTTCTGATCCAAGGGTGCCTGTTACACTCTGCTGAATTT
TTAAGAGGTAATTTACATCTCTACAACCAACTCCAAGCATGACATTTTATTACATCCGCTCAAAATGAACAGCTGCTA
AGTCATCAAGTTCTCTCAACTTTGCTTCTAAAGAGAAAAGTTTAGTTTATAGTCTTCACTGAAATACTTTTGAAGA
ATGACTTTTATAAAATTCATTTGTTTATTATGGTAAATAAACAACCTTAATGGCAAGGGGTGTGTTCTTGTAAAGGTGA
TCACGGAATGTTACCCAGAATAACACAGACATCTCATTTCAGAGAAAGGAAATGGTTTTATAAGTTTTGTGAGGTCTC
TTGTCTGCTTGGCCGGTTTACAGTGTCTGGTCTCTGGAGCTGATCCGCCCTTTGCTTTGTAAAGTCTCAGCAATTGACGA
GGCTAGGCTGGGCGCTGGGCTTTTCTTTTTTTTTTTTTTTTTTTTTTCTTTCTCACTGCCCTGCGGTGTTTTGAACTGC
CTTCTTACAGACGTCATACAGCCCTTGAGGAATAGTTTCTGCTGGTGTAGATTGAATGATAGTTCTCATTACAAAACC
CTGGATTCTAAGCAGGGACACACAGAAATTACTTTTCGAGGTAAATCAGCCACCCAGCCAAAGTGTGGAGAGATTGT
TCCTTGGCTGACTTCTTTGCTCCACGGAGAGGAGTGTTCCTGTGCTTGCCTGAAATGGAACCTTCTTGACAGCTCT
CCCGTGTTACAGTACCTCCCGGTCAATTTCTTTTTCTCTCTCTACCTGCGCTCTTCGAGTGTGAGAAACCTTTAAAG
CTGTTACTATGGAATTGCAAAAAGAGATCAAGTGACTCTTTCACTATGCTGGTTTCCCTTGTGACCCAGATGAAGAAT
CAATTCAGAATTCAGTTCTTCCCTTGGCATTGCAAGACACAGAAGAACTGTCACTTCCCTAACAGCCTAGTACTGGAGT
AAATTCAGTATGAAGGAAGAAAGCGCTCCTGCGTGTAGAACCTTGCCCATGAGCTGGACCGAGGACAGGAGATGGACT
CCAGGAAATTTGGATTTCTTCAAGCAGCCTCCCTTGGAAATGGAATATCTTTAAATCTTCTTTCAGAAAGACAGTTA
GAATGTATTAATCAGAATAGTTGAAGACTTATTTTCTTTTTTATTTTTTTTCAAATGAGCATTATTATGAAGCCAAGA
TCCCGATCTACAAGTTCCCTAAGGACTGCAGAGGACAGTTTGGTAACGTTCTTTCTCTCATGCTTTTCCCTTTTCTCT
TTTAAGATTGACGTACTCTTGAATTTAGTAAGTTGTGTGATGTGAGGCTTTGTGAAAGAAGGCAGTATTGGCGGC
TCTTTTATTCTTATTTTGTTCCTTCCAACTCATGTGCTTTTAAACCAATGGGTGCTGATTTTTTTTTTAAATTCCTCTTGA
CTGTAACAATTTATCTGATGATAATTTTAAAGGAGGAAAGAACTTCAGATATGTTGGGAGTTTGAATAAGAAAC
TTGTCAATTTTTCAGTGTGTTGATTGAGTTGCTTGTCTTCTTCTTCTTGTCTGCAAGCAGGCTGGTGGTTGACAG
GCTTTGCCCTTGTCTTTAAAGCAATACCCTCACTTTTAGCACAGATGTGTTAGAAATTAATAATGTTATTTATATTTA

292/375

ATCATACACATGAAACAACTTGAATTTAACTATGTGGCTAAATGTATATCAAGTTGCTTATCATTTCATCTCTTA
TGTTTTATTTTATTAGAAATGATTCCTAGTAATTATATTTTGGTTATTTTAATGCTTTTACTCTGATGAAAAATATG
TCAGTTTCAATGTATTCCTAATGTTCTATTATTTCCCAATGGTGATTTGATATGCTAATCAGCATATGGCATGGCCCTT
AAGGAGTATTTTCCAACAAAGTAACCTTTTTTTCTACAATAGGTATTTACAAAATACTTTTATGGCTATTTTAGGGGTT
AGTCTTATTTTGTCTTTCTTAGTGATTGATTATAAATAACTAAGCTCACCTCTTTGAAATGGAAATAATCATACCTCAC
ACTGGGGAAATAAAAGCAATGATTGAAGTGAGGTGGTTGAGAATGGGAGGAAAAACAGGCCAGCAAAATATGCATTATCA
TGTGAGCAGGCAAACACACATGTAAATACTCAAATTATTTGCGTCAGGAATTTAGCTTGTGTTTTTGTGGATAGGTTAG
CCTTTGCTGTTATTGTAGTGTTTTACAGTCAACCAGAAACAAGAAATTGCCCATCCGCAGTATTTCTGTGAGTTTTAAT
AAATTATAGATGAAGATTTTGTCTCTTAACGTTACTTGCCATTTCTTACAAAATAACACGTGCAATAAATTATTCCTTG
AGTTTATTTAAAGAAAAGATTGCATCTGCAACAAATTTGGAGAGTCTGTCTTTTTTCTCCTCAAAACAATAAATACTG
GAAAACTCTTAAATCCTTGTATGAATTACCATAGCTAATATAAATCACCAACATGAGTAAACAGAATTTATAATATAC
ATGAATTTAACTCATTTATAATTTATACCATTCTATGTGAAAAGATGTTACTACTTTAAAAATAGTGTTTAACCAAAC
TATTTCTCTTTTTGTCTAAACTGCCAGGAGATGTATTTCAAATTCAGGTTTCAATTGGAAATAATTTGTTTCATTTCAG
GAGATGAGTAACATTGACACCCCTTACCTCTCTGAGATTATCATAGTCTATTTTTATCCACAATTATTATATTTTTGT
TTTAAATGTATGGGATATTTTCATAAGTCAAGCCACAATTTAAATGCATTTTTAAATATTTTGATTGTTAATGTGT
GTATTTTTCCATTTAACTAAAAATATTCTCCATAGACTTGGGGATAGAATGATTTCTGTGTAAGAAATAAATCTCTCTC
TATATATGCATGATTCCTTAGATTTAACTACACACTATAGAAACCTCTCCAGTTATTAATCTTACATCTGACTTAATAAT
ATAACCGCTTGGGTATATCACTGCAGCTGCCAAAAAATTTGGCCTGAGGGTATAATCAGCTGTAGTAACAGTTTTGCCA
TTTTATTATCCGCTCTATCAGTCAAATATTAGACACATCTATTATATTTATTTATTTAATTACATGTATAAAATCAATAT
AGATTATAGATTTGGTATATAGAGAAAATATATGTTTGTGTATATATATATATACACATACATACACACACATGT
TTACTTGAGCATTTAAAAAACCCAAACGGCCTCTCTTCTGTGCCTCTGCACATAAAGGCCACAGGCCTCAAATTGCTC
AGAGGACAATGTTTTCTCACCAGTGTTGCTGTCTGCATTTCTCCACCACCACCCTACCCCTAGTTCTTTTCAGTTGAC
TTCCCATGAGAGAGACCTAAACCTTGGCATTATCTCTTTTTCAGATGTTTATTTGTTTCCAGGTGATCTCCAAAT
ACTTTGTCTTGGGACACATCTTTCTGGCTTTACCATCTTCACTCTGATTACATAAATCTATTTTGTGTTCCATTGGTC
TACTTTCTCCAAATCTGTCTACTGTCTCTCCGGGATTCCCTAAAGCCAAACATTACGTTTGGAAAGTTTGTGTTATTGTG
AAGAATCCAATGTTTTGGATTACTTCTTTACCTTTTTCTATTTGTTTCTCTCCAAGTATCATAAAAAGCAGTCCACACT
AACTTGCTCTTACAGCCTTAATTAAATGCTATGAGATATTCACATTTTAAATGGGATTTTCATGGCAAACCTGTATTTT
ATACCCTCTCTTATTAAAGGTGAGCCTGTTATAATTAATTTTATTAATTTCAAGACAAAATACAAAACCTTAA
AATTAATCTATTTGTCTCTTTGTAACATAGGTGTCAAATTTAGGGTTTATTTAATAAAGGTGTATACTAGGTTGCTTT
TATTTAAGGAACAGTTATTTATATGCCACGTTCTAGCAGAAAGTGATTATAGTATTTATTCTTAAGCATTATTTTAAAA
AAATGTGCTGCAATGAATTTGAGAAAACTTTATATATTTTCTTATGCTCATAAAGCTAATAAAATTAGCAGATTCATT
GATTGCAGAAATGTTTGGCTTTCTTGCATATCTTAAATTCAGATTTAGTCAGTTGTTATATACTATGAAAATATTACCT
TACATATTCCTTGATATCTCTTTAACACTTTTATAAACATTTATAAACATTTCCAGGGATACCTCTCATTAAATGTAAT
TAAGACTTGTGATTTAGTTTAAAGTAAGTAAACATTATTTAGTCTTACAAATATAAATATAAAGAGAAGTTTAGTCAATG
GAAGTGGACTTTTTTCTTTCTGCTGACAGAACAGTGTTTAGGATTTATGTGTTACATGTAAGATCATTCATTATGTAA
TCTGAAAATAAAAGAGATGCTACTGTTCAAATATGACTGTGGTTGTTTTTAAAGCAAATTTTAAATTTGGTTATTGTA
TATGTAATAGTACTTATACTTTTTTATTATAAGTATTTATGTAATAAGTATACATGTAATACTTAGGTTTGTAGATGC
AGAAAAATCTGGAAGACTCTGTCCAAGCTTTTGGTAGTGTTATTTTTTAGGAGTAAAAAATAATGGTAGGAGTG
AAGGTAAAGGGGACTGCTCTCTTTCTTCTCAGTATTTGCTATTTGCTATGTTATGTTATGTTTATCAATAAAGTATTATAT
GAAAGTTTAAATATTTAAAAATATACCTACTATATGTAATTAGCAAGCTCATCTTTATATATGCCAAATATCTCATTAGAC
ATTAAACCAATTTGCTCAGGTTATATAATATGCAATGAGTATTTAGTACTGGTTGGATACAAATTTCTGAATTTT
CTTGCAACTCTGACCAATGGAGGATTATAATTTTTTTTATTAGCTCTTTTCTCTTAAGGTTGTAAAAATCTAGACTGGCT
TAGCATTCTTATTTTGGCCTCATGATCACAGTGGAAAGCATTCATATAAGCTAAAATGTCCAATTTTATAATTGAGAAT
CAAAAAGATGGAATAACATTAATATGTTGGAAGGAAAATAACCCATTAAACCCATTATTCATCCTCAGTTATTTCTCAT
TTTCAACTTACCTTACATATCTTAAATAGCTGTAAATACATTTTCTGTACTCTGCTTCTTCATTAAACATATCAATATT
TTTCTATTTTGGCCAGGCGGCTAGCTTGTCTCTGTAAATACCTGCAATTTAGGAGGCTGAGGCAGGCAGATCGCCTGA
GGCCAGGAGTTCAAGACCAGCCTGGCCAAAATGGCGCAACCTGTCTCTACTAAAAATCCAAAAATTAGCCAGAGTGGT
GGAACATGCCTGTAATCTCAGCTTCTTGGGAGGCTGAGGCATGAGAATTGCTTCAACCCAGGAGGTGGAGGTTACAGTG
AGCCAAGATCGTGCCACTGCACTCCAGCCTGGGTGACAGAGCAAGACTCTGTCTCAATTTAAAAAATAAATCCAT
TTTTCTAATACTTATAGCTTTTCATTTTATTGAGTGTCTTATGAAAGAGCTCTATCAAGAATTTTACATATATATTATTT
AGTTCTTATTACAATATTGAAAAAGAGGAGTTGTTAATCCTAATTTTACAGGTGAGAAAATGATTCCGTGAGATGAAAT
AACTTGAGCAAGGTCAATAGGCTGGGGTAACCAAGTCTGTCTACCTCAAAGAACGTGCTCTGGTTCTTTCAGCTTGTTC
CTTCTCTACTGTGGATATAATATCTTTTTTAAATGGCCATAAAAGTGTTTATGTTGTGAATATTTCTAGATGCATTACA
GTATTTGGCAGTTTTCTTTTCGGAAGTATGGTAGCCTATGAAATTCAGGGTTGACGTTGTTGGTTGTTGAAAAATAGCT
TTGTGAAAGACTGTTGGTTGTTGAAAAATAGCTTTGTGAAAGGCTCTTGCAGCTTGTAGACCATTATATCTCTACTGG
TAGCAATAAAGTCTCTGTCTTTATAACAGACAAATAAAGAACAAAAGGCCAATGCCTCACAATTTTGAATAGATTAT
CTTTCCAATTTCTATTACCAAGTTTTCTGTTCTCTGCAAGCTCTGTAAGGCTTCAGGTTGGAAACAAGTAGTACATATC
AGATTTTGTATGACATCTAAGATCAGCTTTGAAAAAATAATGCAATCTCCTTCTATTTCTCTATCTTAGAACTTG
TAAATACGCAAAACAAATGGAATTTCTCATATTTTCTGCTGTGCAATATATATATGATTGTTTGGTTTAGGTATGTGACTAC
TGTCAAAGTTGGTTTTCAGGGTTTTGAGCATGAGGTAACTTTTTTTTGGTCTATTACCCAAGTTAGTGATGTATCTGTTA

293/375

TGAAATATACTTAAAGATATACAGCTTTTAGAAATGATTAAAGATACCTTGAAATATTTGATGTATTTAAAACATAACTA
GAAAGACACAGAGTGGATCACAGATAGGTTTACTCTTTAAAGTCATGAAGTATGAGATTCCCTGGAAAAAGCCATTTGT
CCACTGTACTTCTAACATGCTCTGTGTCCCTGGAGGAGTCACCTAGTCCCTCTGAAGCCAAGTCTACTGTCTGTAAAA
TAAAAGGGGCAAGGCAGGTCAATGGATTTTAAACACGTTTATTTCAATGGGACATTTTTTTATTAATGAAATGTGAGTTG
AAGTTAATATAAATGAATATTTTACTGTAAATTTTATAGATATAAAATCATATATAAATCAATATATAGATATAATTTT
TAAAAACATAGATATGTGTGAAATATATAAGTAAAAAGTATAAGCACACATAAAACAATAAAACAGCCACTGAGTTTGT
ACATTTACCCCCCACCCTCAAAATTCAAACCTCTCCTTAAATACCTCTAAAGACTTTAGGATTCCAAGGAATATTGTTT
GAAAACCACTAAGCTAATGACTGTTAAGATCACTTACAGTTTACTCTCTGCAGTGTGCTGCCCTACCAGCGGAGAGTCAT
TTGTGTATTCTGTATCTCTATATGGATTGGGATAAACTCGTAGGTAATGTAGCAGTTCAAATACCTCTGCCTTATAAGA
CCTTGAAGTTATGTAACTTTTCCCACCTCTGAGATATCACAGAAGAGTTATCACTATAATAGTTAAGATCTATTTCATTT
TATTTAGCATCTTATTTTTTACAAGTTTATTTTTAGGCTCATCTGGAATGAGAAAATCATGCACATAAACACTGTATGATG
CATAGCTGATAATTCAGGAAGTGAGTATGGTTGTTGGTAAAGAAATGCTGAATTTGGTATGAAATTCCTTCAGAAGCAAGA
CGCTTCTTTTGGTATTTCAAAATGGGGTTCTCCACCTCTTTTTCTATCATGTCAACTGGCTGTGGTTATGTGTGCAAT
AATACTTAGTCCTGACTGCAACTCTTTTTTTTTCTTCCCCACGGATCTGAGGCACACCATGGTTTGGCCTTATCATT
AAAACCTTGCCTTTTAGGAGAGGTAAAGGAATAGCTCACTTAGTAGTTCCTCTGTCAATCATTCCAATCATGTAGTGAAT
TCTATTGAATCAGAAGGGATGATGACATGAAGGTAACCATGAGTATACGAATGGTTAGTCATGGATCCACCCAACCAT
ACTAGCAAGATTGAGAAAAGTAGATTCTAAGATGAACTGAAGGGGAAGAATATTAATGAGGCCTTTAAGGAGTTTTTA
AGCTTTTTTAGGGAAAGATGCTGAGCGATATGTATAAATATTTCCCAATAATACTAATACTAAACATATAGAATTGTCAA
GTTTAGATAAAGGTATAGAGAATAGGGCTGAGGGATATTAGCTAGGTTGGTAAGGAAGATAGTCACAAAGAAAGCACA
GTCTTAATAAAAAATCAATATAGATTTTTCTTGGAAAGCTTTCCAGAGGTGATCCAAATATCTCAAAATATAATACAGGG
TTGAAGGTATATTAGAAAATGGACAGAAGTAAGGTATACTTCAGCCACAAGCACCAAATCTCTCCAGGGATTTGGTGCCT
ATGGGAAGGGCTGGGGTACCACATGGGGCACAATGACAGCAAGCCTGGGTGAGACACTGTTAAATATAACTGTGTACAG
GTAACATACTAATGAGAGCCCGTGCCAGTGATATGTCTCAGCTCTCAAATGTCCTAGTTCTTTGTCAAGTTTGACCTAA
ATTAGAAAGCATTTCAAAGTATGGAAAGTAGGAAGAATGCCAGAACCCTATGGATGCAGTTTTTTAGCATGACAGGGGC
AATATTGTAAGTATTTATTATCTGTCTTAAGCCTTCTAAGGGGATTGGCTCCCTAATGAGCATCTTGGGTGATGGCTGA
GGATGCGAATTAGAGAAGCTAACAGAAGGGTGAAGTCTCTCAGAATAAGAGTTAGAAAAACACAAGGGAATATTTCA
AGAGAAGAGCTGGGGAAGTGTGGCAAGAAAAAGAGATTATACAGAGACCAATATGGAAGAATTCAGCCCAGTTTGAA
CTAAGCATCCACCATCTAGCACCTTACCTGTCTTAATAACACTGGCAACCTCTGGGCAAAAGCTGCCATTAATGAACT
CAGTGTAGAGGACATTTGCCCCCATCTCAGCCCTAAGAATTTCTGCCATAGGGTAAAGGGGGTCACCTGCAAGCCCCT
CCATTTCCCTACTACACATGAGGAAGAATAAGAAATTAGAAAACTAGAACTAGGTGTAGAATGTATGCACACCAAGGA
TTGCATCTTCCAAAGTACCCTTATAGGAAGCAGTCTGTGTTTTAAACCCACAGAGTTAGGAAGTTTTCTTTTATATCT
AATACAAATCTTCTTTGCTTAAATTTCTAACCCATTTCTCTTAGTTGTGCTAGATATAATGAGAGTGAATCAATAGAT
AAACCAATTCTTCTTTATGGCCTTTGAAAAGTCTAGTGAGTGACTTCTTGGTCTTTTTTTCATTTTATTTGCAAAATA
TTCATTCTAAATTGTAAATAGATGGCACCAGTGTGACTTGTAAAAATAAATGTTTCATTAAACATAATTTTCAATATGT
AATGTTTTTTCAGACTTCTAGAGAAAAGTGTCTCCGTTGTATCTAATCTCTTCTTGTTTAAATACATCAAAGATGA
GAAATTGAGCTCTTTTAGTGAAGTGTCTGAGACATTCATATGGAATACAGAAAATAAATTTCTTAACATTTCAGGAT
GTCATTCCATTGCAATGTGGCAGAGTTTTTCTTGTGATCAAGGAATTTATATGACTGATACCTATTAGTCAGGAT
AAATTACTGTAAAATGTGTCCACTTTTAAACCAATGGCATTCTAACATGGGATAGGCAACAGCGGGCTGTGATTTTGTCT
CTGATACTGCAACTTTGTTATAGAATAGCAAGTAAGTATTGGCAGCTAGATCACCAGCTAGCTGGAGAAAGCAGCTTC
TAGGTCTATAGTCATAGTTGGAGTCATAACCTCATTAATGATAGCTACAATGTATTGGGCATCTACTCTTTGACAGACA
ATGAACCTTAGTACTATATACAGTTGAAGCAACTGTATGAATAAACTGTATGAATAAACTTGAAGTCGCACAGCTTATA
AAATTACAGTGTGTCAGAAAAATCTTGGTCTGTGCAAACTACATCCCATATTTGTTGTTGTTGTTCTTATTGTTTTGTT
TGCTTTTCTCTACTATCTAACTGCTTTGGCTACACATAGTTCTGTTTCATGGTATTAGAAAAGTAGTCAACAAGCTGC
TACTTATACTTTTCTTCTCTGTCTAGACTGTTCAAGTTTCTTCTTTTAACTTATGTATATCAAGAACATGTTTGCCT
ATGGTATTTGTCTGCCTTTCCCCCAAGATTGTATACAAGCCTCCAACCGTGAGCCCTAGAGATATATTGAGAAATAG
AACATGGACTTTGACACGGCTCCATTCTTGGAGATCTAGCTAGTTCTGACTCGTTTCAGCTTATTGACTCTCTTCTCTC
TGGTCAGACTATAAATTTGCAGTTTTTCTTCTCTCTGGCATTGTGACCAGTTAGTAGCACCATAAAACCTTTGAAATAAAA
GAGACCACAGAGAATAACCTATAATCTGATTTTCCCCACCCCTAACCCCAATGTGGAGCTGGAAACATTTTGTCTAGTCT
TTAACATTTCCAGTCAAGTAGGGTCAAGAAAACTGTTAAAAACAATGTCAATGCTTAAGTGGTAAAAAGATTTGTTGA
AGAATATATATATATATATATATATTTAGAGACAGGGTCTCACTGTGTTTTCCAGGCTGAGGTACAGTGGCTATTTACAGG
TGTGATCATATGCACTACAGCCTTGAACCTCTAGTCTCAATCCTCCTGCCTTAGCCTTCCAGTAACCTGGGACTACAGG
CATACACCACCATGCCTGGCTGGAGAAATATTTTTTAACTTCAAAAATGAAGTTTGAAGCTGAAAAAGAGAGCTAAAAA
TTAGTCTGTGAGGCAAAATGTGTGAAAGCAGTTCTATTATAATTTGTATTGAGCTATAATGTAATTCCTAACTTATGTC
ATATAGCTAAGTAAGTACCTGTAATTCGCATCTTGAATTTTAAATTTTAACTTCTTCTCTCTCAATATAGTCTTTCATCTG
AATTAATAAATTTGTGGCAATTTGTATTTATTGTGTACTTAACTATGTGTCAGGCACTGTGCTGTTCACTTGCACATAATTA
TCTCATTAGATCCTCATGATGAATCCTAGACAGTACTCATTAGTCTTATTCTCAGACTGAGGCTAATGAAGTAAAGT
GGCTTGCCTAAATTTGAGTGGCAATAAGATAATTTTCATGATTGCGATATTTTCTTAATTATAAATGTTACCTTTAGC
AATGATGTATATGTTAATATGTTCAATGAGTTGATCTACCTGAAGTGCTTAGCACATGGCTGGCTCCTTGTGAGTGACC
AGGAACTGTTAGCTTATATTATGCATTTTTGAAGTTTACACATTGGTATGACTTTCTAAATAATCAAGAAGCTCTAAATG
TGAAAGCTGATTCATTTTGTAAAGGGTTCTTTTCCATAAGGTAGTCTTTTTTAAACACAGTCAGAATTAAGCATTATAT

294/375

AGAGCTAGGTATTCCAGATAAATCACGTTAATAGTGTGATTCAAAGAAGACACACTGCTATCTAGGTGGGTCAAAGAAG
TAAACTACTTAGTGAGGTGGCAAAATAAGAAGTGGTCAGTGGGAAGCTAAACCACCTCTGATTTAGTTATTTAAACT
CAATGAGAACCCTCTAAGGAAGCACAACTAGGCAGGGGTTTCATCTGAAAGGAATGGTCAGCTACCTGAGCATTATCTC
TAGGTGCACCTTTGTAAAGACTTTCTCCATGTATCTTTCTACTGGGTGCCACCCTGTGGCTGGTCTACGGTAATCA
CACTGCCAGGCATTCTCTACCTCTACAAATCCCCTTACTCTCTAGTCTAAGGTGCATTCTGGTTGTGTAATTCACAG
ATTATTATCTCCCTGGAGCTGAGCCTCATCATCTCTATCAGACCAGACTGAGAAGGACTCCTTTTTCTTTGTCCCGCC
ATCCCAGCTCAGTGCAGAAAGGCTTAAGATGCTTTCTCCATCATTTCTAAAGAACAACAGACAAAAATAGAGATCTGGTT
AGGTCTGTTCTTGTGGCGTGAAGTGTAGGATGAGCTGAACAGCCACAGGGGCTAGAAATGTCAAGAATGCAATACGTT
AGAGCAGGCATTATAGCATTCCTGTCTCTGATATCTACTATTTTATTATGAGTAGTTACCAAAACAAAAACAAACAACT
GTAAAAGCATTATTTTGTATAAATTAACAACCTGCACATTGGATTAAGTGTGATTGAGGGTGGAGTTCACCAGCTTGGGA
AAAAAATTAACCATTAAAGATTCCCTGAGTGTTTTGTCTTTAAAAAGAGATAGCCCAATTACTTTTTCTGTGTTTCGTTA
AGAGTCTACTAGTATATGAATCAGTAAGAGCTTCTAGGGTAATATAAAACACACAAAAAGCAAATTTGATGTTAGC
AGACAACTTTTTTAAAGGTATTCGTGTAACTGAAAAATCATTTTACGTACATAGGAATGAAATTTTATGTTTACCTAGA
AATATATGTGAAATCCCTCCATTATTGCAAGATCTTTTTCATGTAAATATCAAAGAATTAGACAGTCTGCATTGTTTA
AAACCAAGATAGCTAGTCTTTTAACTATGCGCAACTTGTAAATTACGAATAGCAGTAGCTGCCAGACAGAAGAGGGACATAGTGTGGC
AGAGCTGCGTTGGTCTCAGAGAAAAATGTGCTGTGATCCATTGGTGATCTCTGCCAGACAGAAGAGGGACATAGTGTGGC
TGCTTGCCATTTAAATGGCCTTGATGATCTCATCACTATATATCTAATCTCACCATTAAATTTGCATGCAAATA
AAGTCACTGTAGCAGAAACAGGTTTTATGCATACATACAAATACATGTGTATTTTTTGTATGTTTGTCTATTTGTCA
CCTATGAAGAACATATAAATATTGTAAACAGAAAACTCTTTTTTGGATGTTGCAAAATGCAAGAAAGAAAAATAAGTAAT
TCTAATTTTTCAAAGGTCACCCTGTAAATCACCACCCAGATTAAAAATAGTACCAGCAGCCAAAGTCACCTTTATGCCC
CTTTAAGCCCCCTGCCCCACCTACTAAAAATAATAGTGATCCTGATTTTGAATATCACAACCTTTTTTAAATTTCTGTCT
TTTGAATTTTATATAAAAGGAATAATATAGCATGTACTCTTTTGTGTTTGGCTGTTTCCCTCACCCTTGGCAAAATTA
TGTTTGAAAGATGATCCCTTGTGATGCGGATATGGTTTCATTCTCCTTAAGTATAGGTAATTAAGCAAACCTTTT
GTTTGAGATACAAATTCAGGGTAAAAATCAGATTTTCTATTTAAATAATAATTTGGTATATATGACTATTTGAGCATT
TAAACTGTTGTCAATTTTACAATAATTTATTTAGTATGATTTAATATCCAAATCTGTTGCTTAGATTACCCCTCAGTGG
ACATTTCTTCTGAAGGGCTTCTAGACTTCCCCAATTAGAATTTAAACTCTCTTCTGTGCTGTGATGAAACCTTGT
ACATTTCTCTAACTCTTGAAGGATTACAATTTATGTCTTCTGTCTCACGTACCTCTCCTGTGAGCATGTTTTGGAGTAG
ACTGGGTTTGTCTCATCTTTGTAGAGCAATGAACCCCTGTTCCCAGCACATGCCTGCTCCATCATGGGCATTCAACATC
TGTCCTTTGCATGGAAAGTAGAACAGTGAGTTCTTCCATATTACAAAGAATATTACAGTCAATTTTATTTTTAATTTT
CTTTTAGTAGATGGCACTTTTCAGGAGATTGTACTGGGTGAGTTGTAGACACAGTAGTTACTCTTTATGGCAAGAGTTG
TATAGTATCCGGGAGGATTTTTGCTCTTCCCTGTGGCTTTCTTCCACCTTAGTTTGGCCACCACCCTGGCAATTTCTA
ATCTAGGCACACCTTCCATTGCCTCCTGTGTTTCCATTCTAAAAATATATACTTCCAAGTTTTCTCTATATTTTCTGA
CTGCTCGAATGACTCTTCTCGTGTCAAACTAGTAAAGAGTAGTGATATAGAAATGCTGATAAATGTGTTGCACATG
GTTATCACCCGACTGACATGCTGACCTTCTGACTCTATCAATGGGTGATTTTTATATGAAGCCAAGAAATCTGTTGGTG
GTAAGTACTAAGACACCACTTCAGGCTCACTCTAACCTCATTGTGTGCATCTTGAAACCCACACAGTTGTACATAT
GAGCAGATTCCACAGGAGGGATGCTGAACCAAGTGACAAGCTTGTCTGAGCCCTAACACAGGAGTTGACCCCGAC
CTTCAAAGTCAGGGAACAACCTTAGGGTTGGCTTACCTTCTGTATGTGTAACCTTTTCCGATTGTGGAAGCCAGCTTTTAG
CTTTACCACACTCCCAGACTTAAATATTTGGAATGGCAAGAAATTAGGCTTAAAAAAGAAAGGAATTAAGGCTTAA
TCCTTAATAATGAGGAAGTAATTTGTTTTAGTATTGTACAGAAACATTTTCTAGCTACCTGATCATTTAGTCTAGTTCT
ATAGCTTAAATATATAGTCTTAAAGAAAAGTTTTATTTCTGTGGGTCTATTAGTTACAAAAGTAAAGGTGCATTTTT
TATTGCTTTATTTAAGTGTTTATTAAGCTTGTCTGCCACAGGTACCCTGTGGCTGTTAGAGAGACAAATGGTGAAATA
TACAGCACTCGGCTTCATAAAATTTATGGTCTAGTGACTTTCTGAAGTATTTCTATAGGGCAGGAGACTTCTATTTTAC
CTTCTACTATATCCTTGAATAGTTTTTACTTTCTGGTAGGAGTGTGCATTTATATAAGTGTTCAGTTGCTTCCAGA
AATCCAGTGGTAAACAACATAATTTTAAACCTCCCTACTTGAATTTGGGGTGGAGTAATATAAAATAAATCTGGAATA
TTTGATTTTTTTAGACCAAAATACTTTCCCTGGGTTAGAGAGATATTTCTTTTCTTACTGGCCTGGAATCCATGCCAT
TTTAATAAGAGATATTTTATTCTAGGTAAATGTTTACTTAAATCACCTCCTAACAGGCTGTGTGACCCAAGTTAAAT
ATTTAAATTTATTTTTATTTTAAATAAATTTTAAACCAACAGATTTCTTTCTCATTTTAAATGAATTTAGCCTTTGAGTT
TTCAAAGATAAAATATACAGAGTAGAACATTTTAAATGTATCTGTAGAGAGGGAAACAAAAAGGGCACATCAGGAAAAA
ATAGTTGGAAAAAGTGAATTTTATACAAATTAACCTCATAAATGAATATAAGGCATTATTTCACTTATTGCCCCAAT
CTGTCTTTACAGATAATCTTCGGGAGACCTTTATTTTTATAGGCCCTAGTTAAATATTTTTTGAATGCTTGAGGCTCT
ATTTCACTAATAAGAGAAATAAATTTTTCTTTCTATAAATAACTGCTACTAGCTTGTGTTGTCAGCTCTCTAAATAAAC
TCATTTTACTATTACTATGCTTGAGTGTGTTATATATTCCTTTGTTACTGTGCATAATCCCTGGCTATAACTGCATTA
ATAAGTAAGGCCATTACATCAAATAGGGATCTAACAAAACTTTTGAATGGACTATCAAAGACCAGATTCAATGCAGGA
AATCAGAAGGAAATGGCATTATGTCTAGTGTAGTTTCAAGTAAAGGCCTGCCCTTAAGGATTACAACTGCCATAAAA
GGGCACCATCAAGAATGGAACCTGTTTACAACAAATATCAAATATTATCTGACTTTTCAATGAACCAATTAT
TCTGACTGCCAGTACATCTGGACTACTATACCATTGTGTGTCAGTTACAGCAGCTCCAGTTCTATATGGCTAGT
TTTTGAACCTTAGTCTGACTTTTAAACCCATCCCATTTACTATCTCTGCTTTTTTTTTTTTTTTTTTTTTTTTGGTGGGA
AATTCATAAATGATTTTTTATAAACTTTAGCCAGTAATCGGGAAAAACTGTAAGATTTTTGTTTGTAAAGCTTTATAAACG
TTACTTATAAGATTTTAAATGAATTTCTAAATTAATTTCTAATTTGAACCTCTCCCTTCTCTTAGCTTTATATGCTTGGT
CATCCCTCCTTAAGTAATTAGCTTTTTTGAAGCTTTGTTTTTTTTTGGTTTTTCACTGTTTCTGTTATATTGACGATTTG

295/375

ACTTTCTTATAAAATGTTAGTAATTTCTGAATAAAGTACAGAAGTTTATCTTTCAAATTTCCCATGGATCATTCTTTA
ATAGTCAAACAATTTGTCTAAATTTCCAATACACAAAGAAAAGTTTGTAGCTAACTTACTTCAATAAGATGGATAATTTGT
TCAAAGTGCCAAACACATTTGCTTTTCGTAATTCATGCCATTTGTGTGTTAAGTGTATAAAAGAGATAGAGAAAGAATAT
AGGAAATGTAACATACACATGCAATCTTGGGCTTTCCAAAATGTTTAAAGTACCAAATTTCCCTTGGTGCCAATTTGCTTTA
GGCATTTCATCTTCACTCAGTTGCATCCTAAATATAGCGTAGGTGTGACATACCCCTGTAAATTTCAAATTCACATAAAG
AAGTCCCAGCCTTCGAGGCAAGTCTTAATGAATACTAAATAAAAACCTTAGTGTCTTCTGAAATGTTTCTGAATAAAT
AGTTGCTTTACAGTCTTTGATTTCTATGTTTCGTTAGTGTCCAAATTCAGAATGGGAACCAACTGGGGAGAAAAAGAAA
AAAAGACTCTCAGGACAATCTTTTTAAAGGAGTAACAGATAATCTATTTTGGCTAAGACAGGGTAGATTTCAGGTAGTCA
GATAATAGAAAAGGGAGTCCCTTGTGTATCAACTGATGCTGGAATTTGTGAAATCTATAAAGTTTTGTAGAAAAAAT
GTTAAATTCATGGAAACTTGTTTGGTCATAATCCTCACAGTTTCTAATTTAGTATAACATCCTGAATAAATTCATTTCAG
ACCGACGGAGAGAGAAATTTATTTGCAATATGTGAATTTCTGACTAATAGGAGTAATAGAAAATAATTGGTCCCTT
AGGATATTTCTGATTATATATGAGAGGCTTGGGGAGGGACTCTGTGTAACCGTTGCTTTTAAACCCTTGTTTTGTATGGG
TAAATAGAACATTAATGCTACATGAAAGATACTTACTCTGGCATCCTCAAGAGAAAGTAGGTTCTTTTTTTTCTCAGTT
ATCCAAGAACTTTTAAACAATTTCTAAAGAAAGAAATAAAAAGCACTTAGTTTTTCTGAAAGCATGTTTCAGCTTCTTGCAT
CAGGAGTAGGCCAGATGGCCATGTTCTGTATGGCTTTATAAATATTCCTTTTTTGTTCATGTAAAAGTTAATGGCTAGT
TTTAAACCTTGGTATCATTTCGAAGTCAGACCTTATGTGCTTAACTTCATTCAAAGTATTTCTATTTTGTAGGCTGT
GGAAAACATAGAGCTGAGCTATTAAATTTCCAGGGCAGTTTGGAAATGGCAACAATATGTACTGGAGAGATGGGGGTGG
ATTCTGAAGTCAAATGAATTTGGAACCTATCTTCTTTTACATGCTGGGTGATTTTGGACAAGGGGAAAAGCTACCCAT
AGGGTTTCTGTGAATGTTAAGTGAAATAACATGGAAAGTGCTTGAAGTAATGGTAGGGACACAGCAAACCAAAAAA
ATGCTAGCCAGTTTATTATTAGAAGGGAAAACTCCTATTAATATTTTCTTGTATTATGTTTGTGTTTTTCTGTTAGTCT
TAAACAAGTTACTGTTTGAAGATGTGAGAATTTTAAACATTTACAAAATGGTGTATGATATGACATGTATATGATCTC
TCACAAGTGAAATGATAATGGAAAGTTTACTGAAAATGTCTTAAACAGTTCTAGGTAAAACCTTAATTTTTTCTTAATTTG
AAAATTAATAAAGTATGAATTAGATTTAATCTAAATTTATTATCTGTAAAGTACATGAATGTGGAAAAAATCAG
TATCACTTCTAACTAAATCTGGCCTTGAAACTTCTTTGACATAGCTCTTCTTAAATATATATATCTTATATTCTAAAT
GTATATTTATTTAGAAATATGCTATTTCTAACTGAAATGTCTGATATTTCTAACTGATATATATATCTATATATGATAT
GATATATGATTATATATATGTTATCTATATGATATATAATATATGATATATATTTCTAACTGATATATAACAATGTATCTC
AGTTCTTAGAGATATGTAAATTTATTTTTAATAGTAGCCTACAAAGATGATACAAGAAGATAAGAAATAAATATACTTT
TATATATAAAATAGTTCAACAGCAAGATTTCTATTTAGAATAATTTTCTACAGTTTTATTTAGGGTAGTTTCTATACAG
AAAAAATACATATTTTATCTCTCTTCTGTGCTAGGCTCTGGAGATGCAATGGTGCCTCCCTCCCTTCTGAGCTTACC
AAGCAAAACAAATTCATAAATAAATTTATCTTAATTTGTGTTTTAAGTCCAGTGAAGAGAACACAGGAGGGACCGAGT
TAAACAGTGTGTTTGTGTATGCTGTGTATGGGTGTGTGTCTGTGTCTGTGTCTCTTTGTGGCTGTGTGTCTTAGAG
ATGTACTTTAGTTGGAGTGGTCAGGGAAGTTGAGAAGTGAAGAACCAGTCAAACAAACATTGGGGAGAAGGGGATTAT
AGCAGGTACAAAGCTCTTGAATATCCAGCAGATATGAGGAGCAGAAAGGCTATCTTTTTCAATCACTTAAAAAGGAAAA
GAAGTGAAAAGATTGCTGTCTTAAGAACCTTAAATTTATATGGCACTCATGTATAGATTTCCAGTGAAAAGTTGGACAACG
TGAAATGATGGGTTTCTACCTACAAGTCTCCAGTGTGTTGTCTTTGACTGGGGTGTGTTTCTGTACATATCTGACCTGAT
TTCTGTTGCTAGCCTGTCTTCCCAGGGGCCCTTGGTGAGCCGAGGTGAGAGAGTGGACTTCACCTAGGAAAAAAGGAA
AGGCTTCTGACATAAAAGTGCCCTTGAAAATGTTCTGCTGTCTGTAAATCCCTTCTCTTTACACAAAGTTTAAAGCCCTC
CCAAGAGTTTGACTTGCTAACTACAAGAGCATTTTTTATTAGGTGTAAGATCTCACTTTGACTTTAAGTAGCAAGTGAC
ACACCAGGCAACCCTCGCTGAATTTCTCTTGGCATAAGTGCATAGATTTTCAAGTGTCTTAATGCCCTCTCTGAGCTAAAT
TTGCCCTCTGATCTGAGTTCTAAATGTAATTTGGATAGTAGATATATGTGAGTAAAAAAATTTCTACCAATGGTTGGAA
TAGTTTTCCCAAAGAAATGTAATTTGGCCTTTCAGCTGGTAAATAGGATGTGCTGCTGGATGAATGACATGGTTGATGCA
AAAGACAGATGTAAAGCCGTGGTTCCCAAACTGCAGTAGGGATGAGCATGACAGCCACACATCAAAAGGCCAGGTACT
GATATTCTTACTGAAAAGACTGCTCAGGATGTATGTGGTGTCTTTTTTCTGCGCCACCTTAAAGAGTTTATGATGGG
TTCCATCAGCTTCAAACAGCAAAACACAGTTTGGCCTGTATGAACGTGAACCCATCACACATCATTGCCACGATCATTTT
CCTCATGTATGCAAGTTCTCAAGTATATTTTTTGGTCAAAAACAGCAAAATCATGACAAAAGCAACAATAACAACCAAA
AGTAACTAAATACGATTTTTTATTAGTATGAAATGTATGCAATGTAATTTTCAACATCATAACATTTATTAAAGAT
GTATGTATCACTTTATTATTCTATGCTCATCCCCCTCTTTTATACAAAATGGAGCATAATCTGCACATTCATTGTTCTG
CAGTTTGTATTTTGCACCTGACAGTATGTTGATACAAAGAGAAGCTACTTGTGTTGCTCTGGAAGAACTTTATTGAGAT
ATAACTCGTATGCCATACTTTTCTATATAGAGGTTATATAATGTATTGATTTTATAGTATATTTACGTAGTTGTTAGTT
AATATCTACCATCTTTTGACCATAATGAATAACAGGGTTTTCTCTGCACAGATATGTCCATTTAAGTAAAGATGCCAAT
GCAGCTAAATAGAATCACTCAAAAACAACTCCAAAATGAGCCAGGGAGAGTGGAGGGAAGGAAAAGGAGGAATGCATCC
AAACATAGCCCTACGTTCCATGAACACTCAGTAACATCATCAAAACGTGATGCAATTAATTTTACCAGGTTTACTGCT
GTCCTGATGCTTTCCAAATTTTTTTTGGACAACAGTTTTTGGCTTTTTTCAAATTTCAAATGGTATAATTTGGGGCTTGGTAGTT
GATGTTTATCTTAATTTGAAACAGATTCTCTTTCATCCTTTTTGCTCTGAGACTCCCACTTTGAGGCTGAAAGGTCATTTTA
AATCTGCAGAGCACTCGAGAGGCCACATAATGAATTTCAAACAAATTCATGCCTATTAAAAAGGAGGCTTCTCTTTCTCAA
CTTCCAGAGCTTACATAGAAATAAACCATTTTGGTTTTTTGTCTGACTTTCTTTTAAAGGAAGTTATTGTGCTTCTTTTT
AATGCTCTAACTACAGAGAATGGGGAAATCCTGTTTTTCAITTTATCTTATCAGAAAAGAAAGTGATTTTGTCTCAGTAAT
TGCAATAAAATACTACTGGGGTTACAGCTACTATACCTTGTCAACAAATTTAAGGGATATTCTTTAGCTGCATTACTTTA
AGGATTTCTGTCTATCTTTATCTAGCAACTTCATTTTTTAACATTTACTCTATGTACTTGTGTAAAGGTGCAAAAAA
TATATGTACAAAATGTTCTGCTGGAGTTTTTGTAAACAGAACTGGAGAAAGCCTAAATGTCAATCGGTATATGGCTG

296/375

ATTGAACAAC TGATGCACA ACTATAAGACA AACTACTGTGCATCTATGAGGAAGACCTCTCTAGTATGACACTATCTCCAG
ATGACATTTTACTATTGTATTATTTTATACTTTGAAAAGAAGATATGCACACTCCCATGTATCCATTTTCAC TAGTTTT
CTTTGTATATACTCTTAGAGTTTATGTAAGTGCAATGAAAACATAAATTCTATTCTCTTCCCTCCCTTTTAAACAAAA
GAAGTATAATCTGCACATTCA TTGTTCTGCAGTTTGTATTGTCAGTTGACAGTGTGTCAATACATAGAGAAGCTTCTT
GTGTTGTTCTGGAAGACCTTTGTTGAGATATAACTCACATAACCTACTCTTCATCAATACAGGGTGTATAATTTCTGTGA
TTTTTAGTATATTACACACTTTTGCAACCGTCACCAAAATCAATGTAGAACATTTTACTACCACTATAAGAAACCCCT
TACCTTATAGTTATCACCTCCATCTCCCCATTACCTGCTCCATATCACCTGCCTCCCTTCCACCCACAGACTCTAGG
CAACGGCTAATCTACGTTTTTTTCTCTATAATTTGCTACTCTGAATGTTTCATATAAATGGAATTATATAATATGAG
GTCTTTTGTGACTTGCTTCTTTCACTTAGCATAATGTTTTCAAGTCTCATTATGTTGTAGCATATATCAGATTTTCATT
TTTTAGGACCGAATAATATTCATTATATGAATATACCACATTTTGCTTATTTATTCATCAGTTGATAGACACTTGCGT
TGTTTCACTTTTTTGGCTATTTTGAAATGTGCTGCAATGAACATTTATGCAAAAGATTTTGTGTGTGCATATATTTTCCCT
TTCTTCTGGGTATATTCCTAGTAGTGAATTGCTGGGACAAATGGTAGCTCTAAGTTTAACTTTTGGTTATTTTCCAG
TGTATCTGCATTCTCATGTTTCTTACAGCAGAAAGTTATTCTCTTGAATGGCTGCATCATTATTGATGTAGTCAAGGTG
TATTTTTAAGTGGAAGTTAAGGCACAATGTTCCAGTTATGGAAGAAATATGCTAAGACTGTACATACATAAATATGT
TTCACCTCAAAGCATCTTCTGCGTATGCACCTAAGGTGATGGTAGAAGTTGCTAGCTTTGAGGAAGAGGTGGCTACAC
GTTTGGAACTCTGAGGTAGAAGGGGGCTGAGTACTCACCATTTTAAACTTGGGGAAATTTTACTATGTGTGCTAATTAAT
TTTTCAATTGAAAATTTGATTCAATTAATGTAAAGAAGAAGAAATGTAAAAAATAAAAAAGAAGAAGAAGAAATGTA
TTTTCTGGACTCCTCTGACCAATGTTGGTCAGGCCAGGGGCTTCTTGACCTGTGCTTTGTTTGTAGTCATCCGGCACCA
TGAGGTGCTTAGTGCTGTACAAGCACTCTTCTTGCCATCTGCTCTGCTTGACATCATTTTTTAGTTATTAGGACAAAAA
TTAATGACTGCTTTTCTATCTTTAAGCCAAGACACCATTTAAAAACAGACATTTAGCTCTTACTCTAAATTAGTGTTT
CTTAAATGTTTTATTCAAATCAATCCACATCAAAGCAAATAGGAGGGGAAACTAGGGTAGACATCTGAGTGAACCTT
GGGATTGAGAAATAGGAGGGTGGTATGTGAACATAATCAATTAATGGTATTAGCAAATAGAGCTGGGCAGTCTGTCTGAAG
TGCTTCCAGTTTGTGTACATTCTTCTCCAAGTATCATGTGTGTGGTGAAGAGAGGGAGTCTTACTTTCCGCACA
GTTTCCATCATGTGACTCTGGAAGGGCTTTGTGTTTGTGTTCTCATCTTTGCTTGAGAATCAGCTGTCTTATTTTGGGCTT
TTCTATTTTTTAAGACAAAACCTACCTATAGTGGTTATACATGAACACACCAGTAGATTGATTCTGCCTTTGGTTA
AATTAGTTTGCCTTATTAAATGATAGGAAGAATCAAATTCGTTTGCCTTATAGATTGTTTCATTCTTATATTCACTC
ATGTATTCATTAAAGCATTTATTTATTCAACACTCCTATGACATCACTCCTCACTGAGTGATGATTCTTCTAGGGTGCC
ATAGAGGGCTTGATTTCAGCTGGAGGAAGAATAATTTAATATCCTTTTAAATGATCAAATTTCTAACCAAAACCAATT
TTGAAAAATAACTTGACTTTGCCTAAAGTACATTAAGAAAGATATAGAAAAGAGATTCTATGAAAATGAAATTTAATA
ATGTAAAAATAATTGGTTTTATCAGAAATTCATAAACAGACTTTACTTAGAGTTAAAAGTCCCTTTGAGAGGAGTAAAA
TCATTAATGAAAAAATGCATACATTTTCTTCAATCATCATCTATATCCCATCGTGATAATGAGGAGTACGCTGTGTGT
AGTGAAGTGTGTTGTCAGGTGGAGGGAGTTTGTAGTAATGGAAGTAATAAAGATGCTCCAGAACAAAGTACCGCATCCAAT
TAGCTTGCCAAATTAACAATCTATTCTGAAGTATTTGTTTATGAAGATGATTTTAACTAGAGAGAAGTCATATTTTATT
TTGTTTATATATAAAGATATGTTAATCATAAAATGTATTCCTTTCAAACAGTTATACATTTTTCTTTTGGCAGCACTAT
TGTTTATTTTAAAGGAAAAGACAGTAACTAATCACAGCATTTTAAAGAAACAAATAGAGATTATGCTGCTGTAAAGCC
AGCATAAAGCCATTTTCCAAATGTCAACAGAGTTAACAAGAATTTTATGTTGTAAAAACCTCACAGTTGCCTAGTTT
ACTCCCTCATCAAAAAAAGAGGGGGCAAGATCTTTGACATTTTATGTATAATGTGACTAGAGAATGTGACTTCAGTG
ATGATGATGATCTAATTGCAATGCTAAGAACCATGGCTGGGCTACGACTGTGTGTGCACGTTGTTATGCTGGGGAGCAA
GGGTACCTAGGAAAGAAAGCAATAATGAAAGTATCACTTGGGTATTTGTTTATTTCTGGATCTTATTCTATCTGCTCCA
TATTATCACTTTGGCATTATAAATCTAGATGATGGCTGGGTGGGTGCAGTAGCTCACACCTATAATCCTAACACTCTGG
GAGCCGAGGTGGGAGGATCACTTGAGTCCAGGAATGTAAAGACAGCTGGGCAACATAGGAAGACCCTGTCTCTACAA
AAAAATATTTTAAAAAATTTCTCCAGGCGTGGTTGCACACACCTGTAGTCCCACCTACTCGAGAGGCTGAGGTGGGAGGA
TTGCTTGAGACTGGGAGGTCAAGGCTGCAGTGAGCTGTGATTGTGCCACTACACTCCAGCCTGGGCTGCAGAGAACAGACC
CATCTCGGGGAAAAAACCAGATGATATGTTAACCATATTCACTCATTATTCACTTATTAGAAAATAAGATTTA
CAAGGCATCCATGGAGGGGAAAACAATTACACACCTGGTTAGTTGGGCTGAGGCTTGCAGAGATAAAATCACCTGCACA
CTGTTGCAGAGCCAGTGCTCCAACCTAGACTTCCGGACACCAAAGCCTATGGCCATTAAGCACTCTGCTGGACTGTATC
TTGGATAGTTTGCTTTATGGGGAACGTAGTACAACTTTACAATACAACTTTAAAAATAAAGTATAGCAGAGTAGCAGTT
TGTCCACAGTCAAATATGAAATATGTAAACATTTACAGGTTCTTTTTTTAATTTTTATTTTAGGTTTGGGGGTACATG
TGAAGGTTTGTATATGGGTAGACTCATGTACAGGGGTTGGTTGTACATATTATTTTATCACCCTGGGTATTAAGCCCA
AAGCCTAATAGTTATCTTTTCTGCTCCTCTCCTTCTTCCACCCTCCCTGATCAAGTAGACCCCAATGTCTGTTGTTTC
CTTCTTGTGTGCTGAGTTCTCATCATTAGCTCCACTTATAAGTGAGAACATGCAGTATTTGGTTTCTGTTTCTG
TGTTAATTTGCTAAGGATAATAGCCTCCAGGTCTATCCATGTTAAAGACATGATCTCATTCTTTTTTATGGCTGCATG
GTATTCCTTGGTGTAAATTTACCTCATCTCTCTTTGTTCTAATCTGTGACTGATGGGTATCTAGGTTGATTCCATGTCTGTT
ACTATTGTTAATAGTGCTGGAATGAACATTCGTTTGCCTGTATCTTTATGGTAGAATGATTTATATTCCTCTGGGAATA
TGCCCAGTAATAGGATTGCATGGTCAAACGGTAGTTCTGCTCTTAGCTCTTTGAGGAATTGCCACACTGCTTTCCACAA
TGGTTGAACTAATTTACACTCCCACCAAAAGTTTGTAAGTGTTCCCTTTTCTCTACAACCTTGCTAGCATCTGTTATTT
TTTGTCTTTTAAATAATAGCCATTATGACTGGTATGAGATGGTATCTTGTGGTTTTGATTTGCATTTCTCTAATAATCA
GTGTTATTAAGGGTTTTTTCATATGCTTGTGGCCGCATGTATGTCTTCTTTGAAAAGTGTCTGTTTCATGTCTTTTGC
CCACCTTTTAAATGGGGTTGTTTGTCTTCTTCTAAATTTGTTTAAAGTTTCTTATAGATGCAGGATATTTGACCTTTG
CCAGATATATAGTTTGCAAATATTTTCTCCCATCTGTAGGTTGTCTGTTTAACTCTGTTGATAGTTTCTTTGGCTGTG

297/375

CAGAAGCTTTTAAGTTTATTTAGATCCCACTTGTCAATTTTGTCTTTTATTGTGATTGCTTTTGGTGTCTTTGTCATGA
ATCTTTGCCTGCTGCTATGTTT CAGGATGGGATTGCCTAGGTCATCTTCCAGGGTTTCTATAGTTTGGGTTTATATTT
AAGTCTTTAATCCATCTTGAATTTTTTGTGTGTATGGTGAAAGGAAGGGGTCCAGCTTCAATCTTCTGCATATGGGTA
GCCAGTTATCCCAGCACCATTATTTGAATAGGGAGTGTTTCTCCATTGCTTTTCTTTAGCTTTGTGCAAGATCAGATG
GTCCTAGGTGTGCAGTTTATTTCTGAGCTCTCTATTCTGATCCATTGGTCTATCTGGCTGTCTTGTACCAAGTACCAT
GCTGTTATGGTTACTGTATCTCTTGTATTATAGTTTGAAGTTGGGCAAGGTGATGCCTCCAGCTTTGTATTATTTTATTA
GAATTGCCTTGGCTATTTCGGGCTCTTTTTGGTTCCATATGAATTTTAAAAAGTTTCTTCTAGTTCTGTATTTCACAGCT
TCTAACTACATTCTATTGTTGGACATCTTTATATTTTATCCAAATAGGAAAAACATTAATTTAAAAATCTTGTGCATATAA
TCTACAAAATATTTATATTCAAGGCACAATGACCCTTACATATTCTTTTTTCTTTTCTTTTCTTTTCTTTTTTTTTTTT
CGAGGCAGGATCTTGCTCTGTTACCCAAGCTGGAGTGAGTAGCTCAATCACAGCTCATTGCAGCTTTGACCTCCCATG
CTTAAGCGATACTCCACCTCAACCTCATGAGTAGCTGCAACAACAGGCGTGCCCCACCACTCCTGGCTTGTTTTTTTTT
AATTTTTTTTTGTTTTTTTTTTTTTGTAGAGACAGTGTCTCCCTATGTTGCCAAGCTGGATTCAAACAATCTGCCTGCCTC
AGCCTCCCAAAGTGCTTGGATTACAGGTATGAACCACCATGCCAGCCCTTAAAAATAGTTTTTATTATAAAGGCAATTT
ATGTGCATTCTAGGTTTCTTTAAAAACCTAGCAAGAGGCCAGGCATGGTGAATGCCAGAAATCCAGCACTTTGGGAG
GCCAAAGTGAGAGGACTGCTTGAAGCCTAGAAATAGAGACCAGCCTGGCAACAAGCAAGGCCCTGTCTCTACAAAAA
TAAAAAATAAAAAATTATTTTTTTATGGTGTGTCCCTGTAGTACCAGCTCTCAAGAGGCTGAGGTGGGAGGATTGTGTTC
AGGGTGCAAGTGAGCCATGATTGCACCACTGCCTCCACCCTGGGTGATGGAACAAGACTCTTAAACATACACACACACA
TATACACACACACACAATACGACACACGTATAGAAAAAATAAAAAATACAAATATAAAATTTCTCATAACCTCAACACACT
CCCAATAATCACTGCTAATTCTTAGTTATTTTTCTTCTATTCTTTTTTCCAAGCAAGTATGATACTAATAGCAATTACCT
GGATTGTACAGTTTTAATTTCTTTTTTTAATTTAGCATTTTATCATGAGCATTTTTTCCATATCACTTAACATTATTTCA
AACATTACTTATATGGATACAAAATGTTTCACCCATAAAAGATTTTGTAACTTATGTATTTGCCAATTATTGGATATTC
AGGCTGTTTCTAGCTTTTCCCAATTATTAATAATATCAGCAAGGAACATCTTGAAGTGAACATTGGCTTATCTCTGA
ATATTTCTTAGTAAATAACTATGTCAAAGAATATGACTATTTTAAAGTATTAATATATGTTGCAAAAAATACTTCT
CTAAAGGTTATACCAGGTTACACTCCAAGCCACACTGCTTGAGAGTTCTCATCTTACTGTGCTGCTGCAGGAAATGTTT
TTCTATTAATAAAATCTTTATTCACATATTAGGTTAAAGTGATTTTCAGTGTGTTTACTTTAACACTTTTGGACTAC
TGGTGTGAATAAAAAATGGTTTTTAATATTTTTTATTAGCCATTTATCTTCTGTTAATTTTCTGTTTGTCTCTTCGCTTATT
TTCTATTGGGGTTGCATAGTTTTTTTACTTTTTTGCAAGAGTCTTTTATGTATTAGATAGATGAACCTTCTCCAGCTCACA
TTTATTGTAAATATATATTCCAATTTTTAGTCCCTTTTTTACTTTTGTTCATGGTGTTTTATACAGTCAAATTTATTGA
TTTTTTTTCTTTGTAACTTCTTTCTTTGCTTTAATAATTTGAGGGCTTTTATCTTAAGAGTAGATAAATGTTTAGCTA
CATTTTCCGTATTTGTGATTTTTTAACTAGCTCTTAATCTGTTTGGAAATTTATCTTAATATAAGGTAGGGATACAAGT
TTATTTTTTCCCACTATACGTCTCAGGACCATTGTGTTACATGTGCCCTACTTTGCTTATTGCTTTGTGTACAGATAAA
ATTTTATGTATCATCTATCATGTGTAGACACCTCAGATATAAATTACATTTTACAAATAACATCTCAATAGAAACAAGT
AGAAAAAAGAAGTCTGGTGCAACCCATTGAGAGAAACATACTACATTACAACATAACAATGATGTAAGTAAATTTTC
TATTTGCCTTCTAAACCTTTTTTATTGCTTGTAGCCATTGCTAACTCCTGAAGAACTTTTACCTTTTCTGTCCCAGG
GAGTTGATTATTTAATTACAGTAGCATAAGACAAAATGATAAGGATTGGAATCCGCAATGAGCCCTTTCACTGGGATGA
AGCAGAGGCTGATGGGACTGGGTGGTAGGTGGGTAAGGTGGCAGATAGATGCAAGAGCAGGAACCACTCACCAGGCACT
AGGAAAAGCTCCATCTAGCCAGGCATATTGGCAATAGTGTGCCCTGACTAGTCTTTGGGGGCAAAACATAACAGTCTCC
TAAAAAGTGGCTCAGAACAGGTAATTCCTAGACATATGCCCAGGCGTGAACAGGACAACCTATTGAGGTATGGAAATAA
AATCTTATATTTTTTCTTATCCGCTCACAAATTTTCTTTTTTCTTGTATTTTGTAAATAGATAAATTTTGTACATAATA
GTGCAAGAACATAACTTATTGAAAATAAATAATACGTAATGGAGGTGCTTGCACTTTTTTTTTTTTTTTTTTTTTTTT
TTACTAATAGATACGGTATCCAATAAAATTGTTAATCACTTGTCTGGATCATGTGACTTCAGGAAGCTCTATACACCAG
CTTGCAAGTTTATGAGTGGGACAGGAAGAGAGTATCTTAAGCCTATTGTGGAAGGCCAGGTGGACTGGAGTCTCAGGAC
GGAAGATAAGCAGGGAATTAAGCAGGAAGCCAGTAGTAATCAGAGATAAGACGTATGTTCAAGTTAACTGCAGCAGG
ATGGTGTGGTGTCTGGGCTCCTGAATCTGTTTTCTGCCTAAAGTCATATCTGTAAAGATCAAGGAGGAGGAGCCAGAGCAG
CAGGTGAGGTTCAAGTGATTAATAACACTGGAAGGAGAAACAGGTTGCAGAACTATGGCTCAGGCTACCTATTACAGCC
ATTTTCAATTTTTTGTAAATGCAAGTGCCTATTACATAATCAAGGGTATCCTTAGTAACATATGAAGCCTACATTCTATTT
CCATTTTTTAAAAAGTTTACCAGTAAACAATTGTACAGCAAATTTTATCAATGTAAAAAGCCATTGTACTCTATCCAGTC
AAACCATATTACCTCTCCTAAAGTGCCCATTAACGAGGCTCTGGGAAATTGAAGTTGCCCTTAATCTTGAGTTACAAT
GGGCAGGGCCTCTTTTTTCTCTAAATTTTACTCAATAAATGCAGGCTTCTATGCATTAAATGGTGGCCACAAACATT
GAACTACTAGCTCACCTCCTGAAATTCAGCACTTTACTATGTGTCTTTCAATGTAAGAGCATTCACTAATTTAACAAG
CATTACATAACATGTGTCTAATAGAGTTCAGTTAGCTAGGCCATGGAATAGATATTCTGTAAATCAACTCCTTTTACA
GTTACTAAGTACTTAGTTTATGTCAGGAGGCAATTTTCAATTAGACTGTGGTTTCTGTTGAGATAAAATGAGATCA
ACTATGTGACATGATTTTGAAGAACCATATTATATTGGTGCATGAATGTATATGTGTGTGGGTGTAGGTAGTTTACAGAC
AGAATGTGTAACATAGGCATGTGGCTTGTAACTGAAACTTTTACAAAACCTAGTTTCAATCTCATTCTATAAAAGTGTGT
ACACACATGTGCATATACACACACACACTGTGATAATGTATCTGTGTATTTGAGGGTTATAAATATTTAGTTGTAGAGT
TCTGACAAAGTAGTAAATAGTCTCACTTCATCTGGATAAAGATCACCATCTGGAACATAAAAAATGCAATGATTCCA
AATTGTTGAATAGTTGGATTGCATATTTACTTTTTCAGTAGTATGTTGGCATGCATGTAGATCCAGCCTTCTTTTCAACA
AAGAACAGTGGTGGAAAGATTCCCTTAAATGGTTACTCTTTCTCAATAAGAGCAACCATATAAAAAATTATAGAACTATT
AGTCATCATAGTTGAAAGTATCGCATAAGATTAAACAGAGTCCCCATCTGGTGATATGTTTTTACATCAGATTTATTAG
ATCAGAGCGGGTTTTAACTAGAGCAATGACACTGCTATTATTAATAAGAGACGGAAGGCCTAATACATAATTGTCTAT

298/375

TTCTTTCTAGACATTTATGTGTTTTTATTAGGATAATGAATACAGAATTATCAACATCATGATCATAGTTTTTTTGGTT
TTTAAGTAGTATCTGTAATGGCAAGCTCATTTTTTATTTTATAACCTACCCACACACAGACCTACAGTGAAGCAAAACAG
ATGCTGAAATATGTTTGTGCCATTGGCTTTGAAGAAACCTCAGAGAGGTTTGCCTCAGTATTTTAAAGCAAAATGGT
TGGTACCTTTCTGAATAGATGTCATTGTGTCTTTCAAACAAAGCTGACACTGTAGAAAAGAAATGGATTGCCTTGTCTT
TTTACCAGTGAACATCTTCACCTGAACAAAACCTCATCAGGAAAAATAAAGGATTTTTCGAAGTGTAGTTGTTGTTAAGC
AGATACTAGTTATTCCATCCTTACAAATATTTTATATATAATATATACATTTATATATAATTTTATATGTATATTTCA
TCACACACCAACATCCACAGACACACACACACACTTGTGTTGACTACTTCCTCTATTCTTGAACGCTTTTGAGAGACC
TGAAATATCCTTGTATGGCAAGAGGGGAATGGAATCAAGCTGATTTTTCATTTTACAATGTGCCTGGGATTGTGCTT
TGCAGTTTAGTGGCATTTTCTGATTCAACCTCACAGAGCCCTGCATGGTATAATATTGTCTACATTTAAGATGAGAAAA
GCAAGATGTGGAGAGGCTAGGAAATCTTCCCAAAGGCACGAAGCTCCTGGCAGAACCAGGATTTGAGGCCAAGTATCAA
GGTTACAGTACAGATAGACATACATACACTCAATTATAAGTAAAGTTTTTATGAGGCTGGGTTTGACAGCAACATGATA
AGTAGAAGTTTTTGATTGGTAAGATTTTTCGAAAACCTCAGAGAGTTTATTGCCAAATTTATTTTCTCCTAGAAACAT
TTTTGTTGTTGTTGTTGCTGGCATGGACAGTTATAAAAAATAAATTAGAAGTAAACAGATAACAGTTTCTGGCTGCCTT
CATGTCTGTGAGCCTAACACGGCTCCCGAAGGAAAAATATGCCCTCAAGGAGGCTTATATGATATTGCTTATTTAGGG
AACCTTTGACCACCTATTTACAATATCCAGTTACAGCTGTGCTACTTTCCTTTTTTGGGCAAAAGCACATATTCGCTTGA
CCATTATTTTGGAGGAAGCTGATATTGCCTGTCACTTCCAACATGTCTTGTGTACCCTAGCTCATAATTGCAGCATTT
AAGCTTGGAGCTCCCCAACAACACAATTATTGCCAAATTTTACCATCGTTGGGAACATTGGTGAGGCCTGCTTCAGAGG
CCTCTTTGTGTCAGCAAGAAGCATGTTGTCAGATATGCTTCACCTTGCATCATAAATGCATTTCTAAAAGTAGTTTCTTATT
GAATTATTTTGAATAACATGTTTTTCTAACTACAAAATAAACACATGTTTCATTGTGGACAAATTGGGAACCTTCAGAAA
ATTCCCAATAAATATTCCAATATTTTATTAATATTTTATAAAATACACATAACCTGTCTATTGCAGCTTCAGGGATAGCC
ATCATTAAAACGTGTTGGTTTATTTCTGAATAAACCTTTAAAGCATATACACACATACCCACAAACATGCTCACACA
CACACATATATATATATATACATTTTATGGTCATATATATCCTATTATGTGCCAGATGAAATCAGGTCGGTCTCTC
TATACATACATATATATATATATATATATAT
ATATATGTATATATATGTAATATGTACATACTATGTATGTGTATATATATGTGTATATATATATATATATATATATAT
GTGTGTGTACACTGTATACATATATGTGTGTATATAGAGCAGAGAGACCTACCTGAATATTCATCTGGCACATAATAGG
ATATATATGACCATTAAAAATGTATGTATATGTATATMTATATAGTGATGTGTGTATACATATATTATTTCCAAATTTTG
AAAATTTTTATTTATTTATTTTGTGAGATGAAGTCGCCCTATCGCCAGGCTGGAGTGCAGTGGCACAACTTGGCTCAC
TGAAACCTACGTCTCCTGGGTTCAAGTGATCTTGTACCTCAGCCTCCTGAGTAGCTGGGATTTTAGTTTTGCCCCACC
ACCCCAACTAATTTTTGAATTTTTTAGTGGAGACAGGGTGTCAACCATGTTGCCAGGGTGGTCTTGAACCTCTGAAGTG
CTGGGATTACAAGCATGAGCCAACATGCCAGCCTGTATATATATATAAATTTTTTATTCTGCATTCTTCGCTTGACATT
TTTAAGAAGTATTTTCTCGTGTCTTTAGGATTCTAGAAAAATCTGATATTCTAATGGTGACATAGGAATCCATTTTAC
ATGTAATAAAATGATTTATTCATATTTAGCCATTCTTTCATTGTTGGGCATTTTAAATTTTCTCTTTTTTCTTTATT
GTAGTGGTTCACTAAGCATCTTTGTAGAAGAAATGTTAATCTGTATCTCTGGTTAATTACTTTGGCAAAATTTTTGGAA
ATGCTATTACTGGGTCAAAGAGTTTAAATGGTGTCTAACTTGTCAAGACATACTAAAATATACTTCCAGATAGTTTTTA
CAACAAATTTTAAAGCTACATATAAAAAAACAGTTCCGGTGGCTCACGCCTGTAATTCCAGCACTTTTTGGGAGGCTGAG
GCAGGCAGATCACCTGTAGGTCAGGAGTTTCGAGACCAGCCTGGCCAAATATGGAGAAACCCCATCTCTACTAAAATACA
AAAATCAGCTGGGCATGGCGGTGGGCACCTGTAATCCAGCTACTCAGGAGACTGAGGCAGGAGAATCACTTGAACCTG
GGAAGCAGAGGTTGCAGTGAGCCAAGATCACTCCACTGCACCTCCTAGCCTGGGCAACAAGAGAGAACTCCGTCTCAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAGGTTATTTTAAAGAAATGTATAGTGAATTTCTCTTTTTTAAAAAAGGGAACAT
TTATATATTTTATTAATTTTAAACCTGCAGTTTTTATAAAATTTTGTCTAGTCCGACACTCTTGTTTTACAAATGGGAA
ATTGAGGCCCCAGTTCATATGAGAGACAAATACAAAATCTGCCTTCAAAGCTGGTCAAAGCAGTTATATCTCTAT
GATCAATTCAGAAAGTTGAGTCTCTGTGTAATGATTTTCAATAGTTGAGGTGATTTTACTGTTTCTCTTTAATGTTGTG
ATATATTTTCTCTCTTATACGACTCTATAGTAAAAACGAGAATCATTTTACTCAATCTGGTTCATGTACAGTATCAGG
CTGTGAAATTCATACTGCTCAGACACTGGTTCTCCAACCTGTGATGTACGTAAGAAATACGTGCTGCTGTCTCTTAAA
TGTAGAGTCTGATCTTCATCCCTAAGACCTGATTTCATTTGCTTTAGATAACACTGAGAGCTAATCATTTTTTAGCAAG
CATCCAGGTAATTTAAGGCCATATTGTGAGAAAAGCCAGTATAACGATGGAGAATTCCTTATGTTGATGCTCTGACAC
TGGCTCTACATCTGTCCATAATTTATTTAACTCCTCTCTGCCTCAGTTTCTTATCTATAAAGGAGGAAAGGAAATGCC
AGTCTCTTCCACCTGGGATTTCTGTGAGATTAAATGAAATAAGCCATGCAAATGATTTAACACAGTCTACAGCACACAG
TAAATACTCAATAAATGTGAACTCATTATCGTTACTGTTGTCAATTGGTATTATATGATATCATTTCTCTGATTGG
AAAATGTAAATGTACAATTTTAAAGTATTAGCATTGCTGGTGGATTATTGATTGCAATTTGTCTGTCTCTCTCTGA
CATTGCTAAATTTCAATTTAAATATTTCCCTTATTTTTCTCTGTTCCACCCATGCACCCAGTGGAGTTGAAAT
TGAGTTGAGATCAAATGCAGCAGGTGTTGCTCAGAGAATTTGGTAAGACTAGTTGAAAAAAGATCAGTGAAACTTTATC
AAAAATAGAATAGTGATTTCTCTGGTCACTGCTTAGAGAACCCATTAAGAAGTGTGAGGTTCTCCAGGCCACCATAGA
GCTATAATCTGCACCTTGTATCAGCCATAGCAGGTATTTGCACAGTAAATTTCCCTCACCCTAGTTTATTCATAGGTCT
GATCATAGCACACTACAGACTCAAACTCCTGGGCTCAAGTGATCCTCCAATGTCAGCTTCTTGAGTAGCTGGGACTACA
TGTGTGGGCCACCATGCCTGACCATGGAGTTCTTAAAAATGGATATTGACATACATATAGAAAAATTCATTCAATAAA
TAGTTATCACTTCTCTATACCTGGTGTGAGAAATATGCTAGATATTGGAAATACAGAAATGAATATATTAATATTAAG
TCACTTAACTAAGCTTTTCCCTGTGATAATCTTTCTGAAACAAAGCAAAATGATACAGAATTTCTTAAAGTACTATTCAA
TTTGTGGCTATTTCTCTTAAAGATCAGTGATCTGAACTTGCTGGCTGCTAGATATTTTAGTCATTTCAAATGTACT
GATTTGGCTAAAGAATCTACTTTGACCAAAATAGGATACCTTAAAAATACAACATCAGCAAAATATGTGTAAATCCCCA

299/375

GAGAAAAGCCCTCTTAAATGCCTACTTATTTCAAGTCAAATTTAGTTAACTACATAAAGTCCCTGAGTGTGAGT
GGAATTTCTCCAGAGCTGTGACTTCGTCAAGTAAAGTTACCCCTCTCTCTTGACCTTTGGAAAGAGATGGCATTGTTG
ATAGTTTTGTGTGTGTCTTAAAGCTGGGCGCTTAACAAATATTTCTCTCTAACAAATATTTCTCTATTAAACCTGAAAC
AGCCTTTTCTTACACCTAGAACTTTGTAAAGAATATGTGAGGAATAGGACAATCACCTTTTAAAGGCTCAGACAGCCAAG
AAGCTGTTTTCTTTTTCAGTCAAGTGTAGAGAGCATCCATGACGCCCCAAGTTCTCAGCCATGGCTGGTACAGGCGGGTG
CAGTAGGAGGCACAGTTGCCACTCCTCAGAAAGAACAGGGACATGGCTGGACCCATTGTCTCTACTTTGGCTCAGGGCCAG
GCAGGGTAGCAGACCTAGTTGTTGAATGCCCTTTTATTGATAGTTATTTAACTTCAATAGGATCTTGTTTTTATGGTAG
GCAGATGGTCTTAATTGGTTTTGAACTTTGTCTCTTTTCATAGCAGAAATTTCTAATCTGCTGCCCAAAATAAGCTT
TGGAGATCTGTAAGTCCCTTAAATAACAAAAATGTACAAAGCATTTAGTAAGTGTACATACAGTGTGCTGAGCACTTCA
CATGCTTTATCTCTTTTAAATCTCATAAAGACTCATCACATAGGTACTGTTTTTATTCCATTTTTTAAATGAAATTTA
AAGAGACTAAATGACTTGAAGAAGGTCACAAAATAAATAGCAGTAGGGTCATTATTTTAGGCCAGGTTATCTAACTCC
AAAGCCCTTAGCTTAATCACTAGGCTATACTGAACTTTATGGAATTACATCCAAAGGGATGTGTGTGTGTGTGTGTGT
GTGTGTGTGTGTGTGTAATTTTTCCGAAGACTCACATTTCCAAAGATTTATAAGTCATGTCGTTCTCAAAGGGGTCTCTG
GTCTCCAAATTTGAACTCTTTGCAACAGGGTGGCTATGTTTTAGAATGACATAAACAGATACAATGTTCTCCAGAGT
CCAGAGCAGGGTCTAAACCTATTGGGATACTATACTTGTGTTATCAACTGAACCACTTGGTTAGTTCCTAGGAAGATC
TGCAGGTCTTGAGCTGAGCTTAGTGTTTACAGACATGTGCCATTCAATTCATCACCTACCACTCATCAAATATCTGA
AGAATATGAAGGCTGAAGGAAAATAAGTGGGTGAGCACAGGTGCAAATAAATAAATTTGGAGCATTCTATTTCTGT
GTTATTTCTTGCTAAACTGGCATATTACCCCAAACATCAATTTGCAATATGCTATTCAACAAGAGTTTTTAACTAGTTT
ATAATAGGAAAATTGCTCTTTTTTAAAAACCAGGGTTAAAGTCACATCCTTTCTCTCTCTGACAAAGTCACTGTCCACA
TAAATAATGGTCTTAGAGTCAAAATAATAACAGAACTTTGTTCTGATGGAGACTGTAAATATACCAATACCTCCATTA
AAAATATAGGTGGGCTGCCTGAACTGAGAAGGTTGTGTGTCATGGCTGTTAGTTTTAATAACTGGAAGGCTTGACAGAGAT
AATTGCGTTAGTGCTTCACTGGCCTCAAGATGCATGCAATGAGTAAATTAAGACCATCTTATTTAAATACCAAAGCAT
TGTATAGGAAACTCCCATGTATTCAAAGGGGAAAGAAGAAAAGGAATTTTCATATTTACGGAGCATGTACTATTTTCAA
AAGCTGTTCTAGGTGCTTTACATTCATTAACCTATTTAATATGTGAGTGTGTTGTAATCCTTTTTGAGTGTGTCAG
GCTCAGAGAGGGTAAGAAGCTTTGCTTAAGGTCCCCCTAGCTGGCAAGTAAACAGAACCTATTCAAATTCAGATCTGATTT
CAAAGTGCATGTAGTTTTTGGCCAGTACGATGCTTGGGGAGCTAAATGGCATTTGGGAACCTAGAGTTAAAGCATCAG
TATTTTTTACTAAGGGGCCATTGGATCCTAGAGAGGCAACGAATTATAATGGATAAAAAATACAAATTTTCAGGCAAGTTA
CTTCTCTTAGCACCATTGCTTTATCCGGCATAGTAATAAAAAATCAAATGAGACAATGGATATGAAATGCTAAAAATAGT
ACATTCTCTGTTGTTATTATCTATTGTGATTATTGTGTTACCTTTGGAAAAAGGCCTGTAGAATAGTGGCAGCTGGGTC
CCCTGGACAGTGAACCTAACCTAAAACTGTCTGGGCAGGCTTGCCTTTGGGAGTTCTTGTATATCAGCTCTAATTC
TGTCCAGGAATTCAGAGGCAGAGAGCAGGGTTGAGGAGAATTTACAGGTGGTAAGATCTCCGGTGAGGAGGCATTTCA
GCAACGTGATCAGTGTGGCAAAGCTATGAAAGATGTTGAAGAACACACTTTCTACCTGAGATATCAACTAAAGTTTGA
AGCTTCAGGAGAAGGCATAGTTCTATCAACAGACAGCAGTACAGCACCAATAGTTAAACCTATATGGTAGATTTAAAT
GCTGAGCCTTCAAATCATTGCTGTTTTTACTTTAGCTCCAGCAAAGGGATAGAGAAACCTTCTTCTGTATCCCTC
TCCCATGTTTGTGCTGTTAAGCAGTATTTATTTTGGTAACAAGAATACCTGGCCTTGCCACTTAATCTCCACCATT
CAAAGAAAACCTTTCTGAGATCATCTTAACGTTGTCTCTAGGCAATAAATATCTCTGGTTTCTAGTTATTCCCAAGGAC
ACTGACCTCACATTTCTTACTGTCTTAAAGTCAAAGTACCTTTGTCTTAACTCACACCAATATGTATGAGACTAGGA
TATGAGAGAGATTGTTACATCTTGCTTGATGTTTTGACATTATAGGTAGTGTAGGTTTTGTTATTACAGTTTGACTTTT
GAAATGCGTATGAGATTTCTCAGGTGAAATAGAGCCTTTGATGTGGTACTCAAAGGGATAACTATGACTCAGAGGAAC
CAATTTCTAAAGATGGCAGCTTTCTCTCTTCCAGTTCTTTCTGTTCAATAGTAGGGCTGGGGAAAGGCAGAGGCAGTTT
TTGTTATTTCAAATGACAGCATCAAAGATAGTAATCCACGGTGCTCAACAAAAGTCAAGTACCTTTTCTCTCTCA
TTCAATAATACATAAGAGCTGATGCTTCAATTATGTTTTAAATACAAAATGCACACTCTTCTGTTTCTCTATATGTGA
GTTCTCATGTATTCTTCAAATGCTCATCTAATTACTGTTACCTACTATTCCAAATGCAAATGCAAGGTCAGTTTAC
TGTTGATCCTATATTACAAGAGTCATCAATTTTGGTTGAGAAACACAAAGGACAAATATCTCATTATTGTGCTAACCAT
GCCTATTATTAGTTTTGTGCCCCATAACATAAGTAATAGCCCCAAATACATGGCACTTATCACACACCAGGCATAATT
CTAAATGGCATGTTCTCCATGTTATGGAAGAAGAGACTGAGGCATGGAGAGAGTGAGTAACTTGGCCAACTCACAAGG
CTACAAAGGCAGAGAATCAGGTTTTGAACTCAGGGCTGCCTAGACCCTGTGTTCTTAACTATCATCATATAGTGTCTCT
CTTACTGTTTTCTCACTGAAGATGAGAGAGGATTAATAATCTCAGGAATAAATGTAACCTCCACAGGTAGGCTTATGCATA
AAATTGAGATGCAATGAATAACAAAATGACTGCCTCCCAAAAATTAAGAAGCAAACATATAATGAGGACTTACTCTGT
GCACACACTGGTGAGGACACGTTACACATTTCATATCACTGAGTTACACACACACACACACACACACACACACACA
CACACCTATATGAGGGCAGTATGATTTCCCATGTGTATAAGAAGGAAAGGGAAGCTCAGACAGATTAGATATATTGTC
TGACATTGTTTCAAGATGCAAGCATAGACCAGAGACCATTATTTGAGACCATGAGGCCTT
TTCTCACCAGTTATTCAATTCACTTAATATTAATCACTTAATATGCATTTGCTGAGCACCTGTGATGTCTTGTAAATCA
GTGCAGGAAAATCATAAGATTTGAAATCACAGCATCTAGGTTTCATATCTCAGCTTCATCATTAACCAGCAAACCAGTAA
ACCTCCCTGTTTGCAGTTTCATTATCAATAAAATGGGTTGACAAAAAATTTATTTAAACAGAAATGTTATGAAATGCAAA
TAAATAATGGATGTAAAGAAATTTGGCAAATGGTCAAGCAAAACATGAATGTTAATTTTATGATGATTAAAGTAAATGG
TATGGAGACCCCAACCTCAAATAGCTGGGAAGGGGTAGTTGATAAGGGGAGAAATGTGTTTAAAGCCAGTTGCTTTAT
TATTTTAAACCTGAGATAATGCTTTATTGACAGTGTGAATAAGATGTTTGAATTTGTGGAAGGAAGAACTGGAGGTCAT
ATTACACATTTCTTACTACATGTTGAGCTTTGAAAAGTGAGAATGATTTTCATGAGGCAGAAATGGTTGGGTCTAAAC
TTCATTATCTGTAACACATACTCCAGAGAGTGAGAAGCATGACCAGAAGTATCTTTGGAGGGGCTAGAGACAAGATT

TGAAGGGAATTAGGACAAGATTTTAAAGTAACTAAGTGCCGTGATAAAGAATCCACTTTTATAGGCCAAAAGTAGTTAT
TCAAGGAAGTAAAATAATTACATTTTCTAGCCACTGCAAGCTATCTCTTTTTCTTCTTTTCTTCCTTTCATTCCTTCT
TCTTTCTTCTTGCTTTCTTTCTTCTTCTTCTCTCCCTCTCTCCTTTTTTCCCTTCTTTCTCCATCCCGTTTAA
CACACACAAAATCCCAACAGCAGCGTAGAAAGTGGTGTGAAGAGCTGGGCATGTGGGCAGGGACACCACCAAGGAAGG
TGGTGTAAATATAGCCTGGTGACGACAGCTTTGGCTCTTCTCACCACCTCCCGCTCCCGAGTAAGCACAGCATAGAGGAAT
ATGAGCTGAGTTTCAGTGTCTCCAGTTGGAATTGGGAATGTTAAAGCTAGAAGGTGAGCAAGTCCGGTGTCTCAACCT
GACAACACATCAAATAGCTATGACAGCCTTTTGAAAATAGAGATTCTGGATCCAGCTTCAGCTTTACCGACTCAGAGT
ATCCAAAAGGAGGCCTAAGAATCTGTATTTTTTAAAGCCCTCTCAAAGTGATATGTAGCAGTAATTGAAAAGGACAATC
TCTTTACTTTCATTGATGAAATAGCTAAGTCCCAGAGAAGTCAAGAGGCTTGCCAAAATCACACGAGGTAGTAGCGGGG
TCAGAACTCAAACCTCAAGGCTCCCAATTCTCAACCCAGTAGTATTGCCCAGCATCAGTTCTTATCTTTGCGTTATAAAAT
ACATTCCTTGCCCATCAACAGTGGATTGCAAAAGCAGGGAGGAAGAGAGGGTGGCAAGGGTCAAAAAATAGCTATCAGGT
CCTATGTTCTCTACTTGGGTGACAAGATAAATTAGAAGCCCAAACCTCAGCTTCTTGCAATATAGCCATGTAACAAAAT
GTGCATGGACCCCTGGATCTAAAAATTTAAAAATCAATAAAATAATACAAAAGAAATACATTCATATTTTTCTGAAATATT
CTTCAGAATATCAAGTGGGAATCCCCTTGTTTTGCAAAGCTGGTCTGATATGTTTAAAGTAAATTTAACCCAGATAGTTGT
TTTCTGTATCTCCCTCTAAGTATTTAACAAACATTTACCATAACATTATAAAGCATTACAATATTGTTAGGATGATTAAACA
AGAGTACCAAAATGAAGGACTCTTGCTAAAAATCCTTTTCCAGCTTTTTTCATTCTACTATTTACAGACATGTAAGCACAT
CCATTCATTTTCAGCAAAATGTAACATTCCACACAAAGGTTTTGAACATTGTGCTCGGCTAGAGAATATTTCTAGTGAGT
GCTCATAAGAGACATTAATAAGCATTGTGCTTTTCATTCAAGCTTTATGAAAGGATTAAGTAATCCAAATTGTTCAAT
CTTTTCATTTAAATCTTTTAGTCCAAAGAACAGAGATTTTGGGATTGAGTCGTAATCCAGCCATTTAAATCTATGAGACTC
TAGGCACATCATTTGCCCTCCTTCTTGAGCCTCAGATTTTTTCTTCAGCAAATAAGGATAAAAATCTACACTCCCAATCCC
ATCACTTATTGCCCAGGGTCACTGTGTGAATTCCACTGAACAATGCCTGTGAAGGTGCTCAGAAAACACCTGCCTTGGA
GGGCATAAGAAGCACAGGAGGAAAAGGCCCTTTGGGAATAAATCTTTTGTCTCACCCAGGACAGGTTATCTGACCATCAG
GGGCACAGATGGAACCTCTTTTGGACATGGCAAGTGGGTAAAGCACCCAGGTGCCCTGAGAGATTTTTTTCATGTGGT
CTGAAGGGCCACATACTTTCGTGGGATTAGTGGCATATGTGGTATGGAACTCATAATTACATTGCAAATTTAAAGGAC
AGCTCTGTAGGAAGAAGCCAAGAGCAGAATAAGCATAGATGTGGTTTGGATTTATTTTTCTCTTGTCAAATTTAACT
TAAGTTCGAAATCTATAAAAAAGAAAAAGAGTGGTGAAACAGTCATATTTAAGATTTTTTAAAGTCTTAAAGACAT
GGAAAAAGCAAAGACGATACCTACACTGCTTATTTAAAAAAAACTCGATTTGAGTTTCATGAAGTACTGGCATTGTCT
CACTCTGTAAATCTCAAAGACTATTTTCAAATTTGGTCAAATTTAAATTTCAAAGGTGAGCAAAGTATATAATCATGTT
TGGGTTCTTTTTTCCCCCAAGTTTAAAAAACTGACATCTATCCTTTTTTAGGCTATCTGAATGTATGAAAAAGAGTA
GAAGTTATTTTACAGCATATATTTTTCTGTAAAGTAACTACATTTAACATTAATAATTTACCAGTGGTATTCATTTT
ATATAAGCAGGCTGGAGATGGAGGTTCTATTTACATATTTCCACTGTCATGGTACAGTATAGTACTAAGTATTTTACAG
GCCAGCAATCAAAGAATTACAATTGCTACTAGGAAACACTAAATCTGAGGATTCTGTCTAGTACTATGTATAGCTGGTT
AGAAAAATCTTTGCTGAATTGAATGGCTTTCTCATTACAGATGGCCTTGTTTACACTGTACTTAGAGTTCTGTGTGCCA
TTTTGGACTCCTCATTTAAAAAGCATAAGTCATTTTTTAAAGAGGATAAGTGGGAAATAAAATGGGAGCCAAGATTAT
ATCGAATAAATCTACAAAAAAGAAAAAGAGACAAAAATACACATAATTGAATATCATAATCTATCTAGAAAAATAG
ATGAAGTGGCACAAAAATGGATGAATATATCAAATGTTTGAGAAATATTACTTCATAAAAATGAGAGAAATTTAATG
CTGGGAGAAGTAAACATTGATTTTTTATTGTGAGAACATAGTTAATGTCAAACAAAGAAAGTCAGCAATGAACATTGCT
TCTCAACTTGAGGTGATTGAGGAAGAGGTCAAATGCCTTTAGAAAAACAGCTGTGCATTTATCTTGGCTGTGGACCTGGC
AAGTCAACAGGATTTATGAATAGCCTCACCATGAATTTGGTCACTCCTGAGGGGAAGGAAAAACCCAAATTAATTTGGA
GCAGAAGATCAGTGTAACACTACTACCATCCTTACGTCTTCTCAATGAGCTTCATTATTTCTCCAGAGTGGCTAGAGTAG
GTAGTTGATGAGCATTTGTGGAATGGATAGGTATCTCTTTCTATGACCTACTCTATCACCCCTCAGGATCTATTAATCC
TTTGAGTTTGATCTCTAAGGTGGCAATGAAATATTTCTTACACCAGAAATACACTGAAACTCAGAGAAAGAGGGCTCAA
ATTTGAGGAGAGTGTCTATACTGGCAAGAGGATGCCCCAGGTAATATCCTTTCTTCTCTAGAGAGGAACATTTGGCTC
TAGAAAGGCATTTAGCCTATGAGTTCAGAACAGGAATGGTCTTAGGCATCTGATTCAACCTACGACATTGCCAGTCTGA
ACCAACTCATCTGATCCCACTGCAAATGAGCTAGGCAACAGTGAAGAGTGGTCTAGTCTGGGTTTGGATAAATTGTG
AAATATTTCTAGAAATTTTCTATAGACTCTGAACCATTTCCCAGAAAGTGTGCACATTCAAATGTCAATTTGCTTCAG
AATAACATTTTGAATAAGGCAAGCCTAATTTTGTTTTTTAACAGAATTTTAAATAATTAATTACAATATTTGTACA
TAGGATAATGGGATATTTTGTATACATAAATAGGATGTATAATGACCGAGACAAATATTTAGGGTATCCAGCACCTTGG
GCATTTATCATTTCTATGTAGTGGAATAATTTCAATTTCTTTCTTCTGCTATTTTGAAATATATGATACATTATTCTT
AACTATAATCTCCCCTATTCTGCTATCACACATTGTAACCTATTTCTTCTATCCAGCTGTATGTTTGATACGTTAGCCA
ACCTCTCTTCATTTCCCCTCCTCCTGGTAGCTATCATTCTATTACCTTCATGATATCAACTTTTTTTAGCACCCACTTAT
GAGTGAGAACATGCCATATTTGTGTTTCTATGCCTGGCTTATTTCACTTAACATTACAGGTCAATTCATGTTGCTGCAA
TGGCAGGATTTTGCTCTTTTTATGACTGCATAGTATTCATTGTATGTGTATGTGTGTGTGTATATATATATATATG
TATTTTCTCTATCGGTTTGTGTTGGTGGGATACTTTGGTTGATTCCATATCTTAGCTATTGTAGATAGTACTGCAATA
AACATAGGGGTTTCAGGTATCCCTTTGATATACAGATTTCTTTCTTTCTTTCTTTAGATAAAACCCAGTAGGGGGATTGC
TGGATTGTATAATAGTTCTACTTTTTAGTTTTCTGGGAAATCTCTATGCTGTTTTCCATAATGGCCATATTAATTTATAT
TCCCACCAACTAAGAAATCCCTTTTCTCCACTCTCCACAGTACTATTTTTTTTTTTTGGTCTTTTTTAATAATAGC
CATCTTAAGTGAAGATACCTCACTGTGGTTTTGATTTATAGATTCCCTGATGATTAGTAATGTGTAGTACTTTTTACATA
CCTGTTGGTCAATTTACATCTTCTTTTGGAGAAATGTCTTCATGTCTTTGTCCACTTTTTGATGGGATTAATTTGGGTTT
GGTTTGGTTTTGTTTTTGCTGTAACTTGAGTTCTTGGCATATTTCTGGATATTAGTCCGTTGTGAGATATATATTTTGC

Fig. 6.295²

301/375

AAATATTTTCTCCCATTTAACATGTTGTCTTTTCACTCTGTTGATTATTTTCTTTGCTATGTAGAGATTTTGGTTTTAA
ATATAGTCCCATTTGCTGTTTGTGTTTGTGCAATGCTTTGACGCTTTAAGGGAAGCCTATTTTCGATCTGGTACTT
CTGAAATCTCATTGGCTCAAGTGAAGCACGGGTGTAAATCCTGAGTGTGTTGTTAATCTCGGTTCTGTGTGTCTTCTGTA
ATCCAGAGACAAATTCATGTGTCAGGTTTCACACTTGAGCTGATCCTCTGTAACCTTGCTGATTGTTGTTAAGACAGAAC
AGAACCAGACTGGCTTTCACTTTACACAACAATCACAACTGTGTGTAATGATTATAGACTTATTCTCTAACATCTCTTA
AGCACTTAGGTAATGAGAAATGTCATAATGAAAAATATCTGTTAACCGAGGAAGATCAAGGGAACAAAACAAAAACCTA
AATGAAGTGTGAAGGTGGTAGAAGTAAAGACATAGATGGTTTCACTTTGGGCCAGAGATAGATTGAATGTGAGACATTG
AAAGTCTAATGTACTTTTCAGTACGTACTTTCCAGTTTACTTTGATGGAACGCACTGTGTGTAATGTTATTGTGCTGACA
AATAAGCCCCCAAATTAATGACTTAAAAAATAAACTCATTCTTCATCAAGTAGCGTTCTAGGATGGTGTGTTAGGAGGA
TGTGGCAGCTCTCCTTGCTCTCAGTCACGACCGAGGATTTCTCCACCTTCTGTTTCTACCATCCTTCACGCATCAGCAT
CTTTAGCATCCAGCTGGCAGAAAAAGAACATCAAGATGAGGAGGAGCTATGAGCCAGTCTGAAAGTGGCAT
GCAATATTTCTGCTCACATCTAGTCACTTTGGCCAAATCTAATTCAGGGAACGAGAACTTCTTTATGCCAGGAACA
GGCAGAGAATGGAATATGGCAGACAACAAGCAGAAATTTCTTATATGCTCAGTCTTATGCTTTTCCC
AAGGTCAATTTGTCTTCAGCCAGATTCCATTTCAAGGAAACATGAAAAATGTTTCTTCACTCTATAAAAACTGTTGAA
GTAGATCCTGCTACCTCTGTGGTAGCCCATCCAACATCTTAAAACTTTTAAAAAGATAATTTGTAACCATACATAATTCA
CCCAATATAAGAAATCATGAGAGAAAGCTAATCTCAGTGTACTTATTATACAATGAGACACATAATGAGACATATCTTT
TTTTATTCTCCACTATATATTTTAAAAAGAAATGAAGAGGCAAGTGATTGTTTATGGCCATCGTAAGATAATATCTTAT
CATTGCTTTGCCAGTAAGATTGAAAAAATGTCTGTAATTCAGGCCACACAACCTCTGAAGCCCTTCGCCATTCAAT
CAAGCCCCATTAAAGGCAGAAAACCCATCTGTTTGGATTGTTGAGGTTGGAACTGAATAATATCACTTCTCCAAAATAG
ATTTAATAGTAGGGCTGGTGAATGGTTTCTGACCTGTTTGATGCAGAGTGCAACCCAGAGGAAAAACATGGTATATG
AGTTTTCGTATCCATTAGTCTAAAAGAATCAGAAATTCGGTTATATTTTAAAGGCAATTATAGTAGAACTATTACTTTTT
TGTTTTCTGTTATAATCTTACCTAGACTTATTTAACATACTTAAACACATAATATTTTAAAGGCTAAGTATTTCTACAAAG
GATTTATCATTCAATCATTCTTATTTAGTCAATAAAATCTTTTGGAGATTAATTTTATAGTAAGCCTAAATACCAAATA
GCCAGGAATGTGATTGAGGATCACATTTTAAAAACCCATCCCTCAAAAAGAAAAATGTAATATCTTGAGAGACAGGTAT
GGTTTGAAGATCACCCCTCTTCAAAGTGAGTTCAATATCTGACCTAATGGAATCACTCCCCATTCCCCAGGACTAGGTG
ACACTCACTGATCTGGGAAAAATAAACACGTGCACTAACAAGAGAAATTTTGAGAATTATGAGTAAGCTTTGAAAAAT
TGGGTACTGAAAATAGAGGGGAGAGAGGGAGGTGATAGGGAGGGAGGGAAAGAATAAAAAGGAATGAAGAAAAA
ACTAATAACAATTTATCTCTTAAAGAAATAGAAGGTGCAGCTGGGTACGGTGGCTCACGCCTATAATCCAGCACTTTG
GGAGGCCGAGGCAGGCGGATCGCCTGAGGTGCGGAGTTCGAGACAGCCTGACCAACATGGAGAACTCTTGAACGCGGGA
ATTAGCCAGGCATGGTGGCGCCTGCCTGTAATCCCAGCTACTCGGGGGCCTGAGGCAGGAGAACTCTTGAACGCGGGA
GGCGGAGGTTGCAGTGAGCCGAGATCGCACCATTGCACTCCAGCCTGCACAACAAGAGCAAACTCCATCTCAGAAAC
ACATAATTAATTAAGTAATGATATAAGGTGCTAAATTTTTATTTTACCCATCCAGTTTCTTTTCTTATTCTTTCTCTGA
TATGTAATTACCTCAGATGCAGATCTGAGGTGAACTAATGAAGATCAAGCTAAGAGCTTCTCACTGGCCTGGTTCCCT
TTCAAGTTGTAAGAAGTGGTACTAGCAGCTGCACGTAGTTTTAGGTTTTGTAAAATTCAAAAACTAAGATTTTTTTGT
ATTATTTTTCTGAAAGCAGACCCTTATAATTGTATAATCTTCGTGTACCACAAAACCTTGATCCCACCCCTGATTGCAT
GGCTGACTGCTGTTCAAACAGAAGGATATTCAAATAACCCCCGTTAAAATGCCTTCTTAGAGATGTTCCAGATTATTT
CTTCAAATGTGCTAATCAATCTCATTAACTATTTCTTTAAATAAGTGACCAACTCCTAGCTAAATTAAAAAATAGTTA
TGAAGTTTATTTAAAGTAGAACTACACAGATAACCATGGTAAATGATAACCGGTATAGAAAAAGTACCGCTGCGTCTAA
AGATACCCATGTATTACGATACAAATATTTATTGAGCAACTCGTACGTGTGAGGCCTGTTGTACCTGCTGGGGGACA
CATTAACGAACAAAGTAGATTTTTTAAAAAAAATCTCTGCACTTGTGGAGCTTATATTCTAATGGGGTGAGTAAGATGA
TAAATAAGTAAAAAACAAGTTTCATCAGAAGCTGTTAAATGCGATGGAGAAAAATTAAGAGTAAGGAAGGTTTTTTGT
TTGTTTGTTCAAAAAAGGTTAGGAGGTTAGGGGTGCCAGTTTTAAATAGGCCAGTATGGGAATATCTCATGAA
GGTAACATTGAGCTGATATCTCTAGAAAGAATATGCCAGGCAAGAGAACTGCAATCCAAAGGCCCTGGGGAGGGAGT
ATGCACAGTGCTTCAAGGACAGCTAGGGACCAAGAGGCTGAGCAGAGTGAACAAGAGGGAGAGATGTAGGTAAAGATGA
GATTAGAGAGGCCACCGGGACAGGTCAGTCAAGGGCTTAAACCATTTAGGAGAACGTAGTATTTCTCTGAATAAAATA
GGACACCATTATGGGATAATGAGTAGGAACCTTGCCGAGAATGGGCTTACATTTTAGGAGGATCGCTCTGCTGCAATAT
AAAGAATAAATGTGGGTGGGTGGCTGGAGAAGTAGCAGGGCACATCATTAAATATCAATGTTTCAAAGTCGGCTTATT
AAATCAATTTTACTTGCTCTATGTATAGAAACAATAAATAAAGACAGAAACACCCCGCAACACTACCTTGGGTATTTT
TCTTTGCTTGCTTGTTTTTTTTTTTTTTTGTGTTGTTGTTGTTAATATTTTAACTTTTTATTTTAGGTTTAGGGTTACATGTGCA
GGTTTGTATATAGGTAAACTTGTGACCCCGGGGTTTGGTATACATATTATTTTGTACCCAGGTGCTAAGCATAGTA
CCTGACAGTTAGTATTTTTTTTTCTGATCCTCTCTCTCCTCCACCTCCATCCTCAAGTTGGCCCCAGTGTCTATTGT
TCCTCTCTTTCTGTCTGTGTGTTCTCATTATTTGGTTACCATTATAAGTGAACATGCAGTATTTGGTTTTCTTTTC
CTGCATTAGTTTGCTAAAAATAATAGCCTGTAGCTCCATCCATGTTTCTTACAAAGAACATGATCTCATTCTTTTATG
GCTGCATAGTTTTCCATGGTATATATGTACCAGATTTTTCTTTATCCAATCTATCATTTCATGGACATTTAGTTTGATTC
CATGCTTTTGTGATTGTGAATAGGGCTGTAATTAACACATGCATGCACGTATCTTTATGGTAGAATGATTTATATTCCT
TTTGGTATATACCTGTAGTTTGATTGCTGAGTTGAATGGTAGTTCTGTTTTTAGTTCTTTTCAGGAATCACCACACTGC
TTTCCACAATGGTTGAACATTAATAATTTACATTCTAACAGTAGTATATAAGCGTTTCCCTTTTCTCTGCAACCTTGC
CAGCATCTGTTATTTTTTGACTTTTTTAGTAATAGCCATTCTGACTGGTATGAAATGGTATCTCACTGTGGTTTTGATTT
GTATTTCTTTAATGATTAGTGATATTGAGCATTTTTTCATACACTTATTGGCCATATGTATGCCCTCTTTTGAAAAATG
TTCATGTCCTTTGCCCACTTTTTAATGGGGCGGTTTGGTTTTTGTGTTGAATGTTTCGTTTAAATTCGTTGTAGATTCGG

Fig. 6.29₆

302/375

[illegible]

303/375

TAGAGCACCCAAATAGGAAGTGGCTGAACCAAGATTTCAAATTTAACTGTGTTTTCTAACTCTTAAATAAACATCTTA
ACAGGAACATTTTTGGTAGGTCAATATTTCTATGTGCCATTGTTCTTACTATGTAGTGAAAAAGGCAGCTTTTCAGATG
GTCCTGGCTTCAGTGATGGCTCCCAGGATTTCCAGCGACATTCAGCAAGATCTTCCCTGTGAGTGGCCCTTCATAGATGC
TTCGGTAATGGAGGCTGCTATTGATAGAGGTTCTTTCAGAGCTGCTCCACTGAGGCCCTCATTGCCCCACCCACTTTGG
GCTTCATACTGGGGGTGAGTGCTAAGTATAAGGTCTGATGGCTAGGATAGATGAGGAAAGCTATTTACTCAGCACAGT
AGCAGGACTCTGGCTCAGGAGAGGGGCCATATCATGGTCAAAAATAAATTGGGAAAAGTTTAACTAGGGAAGCAGTGT
CTAGCAAAAGGCCAAAAGATGAGAAATGACCTTCAGCAGACAAACAATTACAAGGTCAGTAGACACAAAGTATGCCGAG
CAGTTGAGAGCGTGGATGAAAGGTAGATTGGAACGTATTTACCATCCAGTAATTCCACTGAAAATGGAACAGTGTGGAGA
ACTGGGAGTAATTAGTTCATTCGTGCTGTTGTCGACTTCTCTTTGTTTTCTTGKAGGGGGCTGGTTCCATAGAAAAGGA
TGGGTCTGTGGAGTAAATGGTCATGAGTAGTGCTAGCCACACACATTTCTTTAACACTTCTGAAATGCAGCAGGCCAGCTG
GTCATTACTGTTACTGCCCCCTCATGGGAGACCAAAATATAGCTATATCATTTCTCCTCCAAAACCTGCTTCTGGCAAAA
GTTATCTCTTTTAAAGAAATTGTGTGCAATTTTAAATTGCATTAAGGGGAAGCAACATATGGAACAAGAAAGCACCTCACT
TAGTTCATTTGCTAAGCCCTTTTGAGACCCACTGACCCCTTCTTAATTCCAAATGAAATCTCAAATGCTATAAAGAA
ACCCGCCAAATGGGTTACAGCAAAGACTTTTTTACACCTACTGTTATGTTGAGAAATTGAAAAAGCTGGGGATTGTCG
AAATTCCAAATGTTGGGTATATGAAAACTTTTTTTTTTGAGACAGAGTCTCGCTCTGTCGCCCCAAGCTGGAGTGCAG
TGACGTAATCATGGCTCACTTCAGCCTCGACCTCCTTAGTTCAGGTGATCCTCCTGCTCCACCTCTGGGGTAGCTGGG
ACTACAGATAAGCACCACCACACCCAGGTAATTTTAAATTTTTTGTAAAGATGGTGTTCACCATGTTGCCCAGGCTG
GCCCTGAACCTCCTGGGCTCAAGCAGTTCACCAGCCTTGGCTTCCATAAGTGCTGGGATTATAGGCATGAGCCACCACAC
CCAGCCCCATACGAAAATTTAGTCTCAGAAATTAGCCTTTGTCATGCGTCACTTGTAAAGTTAATCAGAAATGTTACTTTCAA
AAGTTCMTGTCAGGTGAGGAAGCTAAAAGGTATTTCTGTATTTTTTTTAAATGAAACTTCATAATAGAGGTGTAAACAGA
GTCCATTCTCCCCAGCCTTAGAATCAGACAGCTTGAGTTTAAAAACCCACTTATGAGCTTGAGCATACTACTGAACATAG
AGTCACTGTCTATGCCTCAGAGTCCCCATGGTCAATGGAAAATACAGTGCTTACTTCAAAGTGTTATGTGAGGATT
AAATGAGATAATATATGCAAAGCACAGCGCTGGAACATGGAAAGTGCTCCAGAAAGTTTATTGTTATTAACATTATTA
TTATTGCCACCATCATCATTAACCTTGTAATTTTTACTCTCCCAATCCTTTAGTTACTTTTTCAAACCTCTAGTTTT
TTGCTTGGGCTCCATCTAATTGGCTGTGAGTCAAAAGAGAATTACCACATCCAAGTGTTTTCTAAAGAAATGCTTTTG
AAAATTCACAACCTGATCATTTTGATACAGCATCTAAGGTAGGGCTACCTTATCCTTCATCACCTCTCTGTTTTTATC
ATAACACCACGATGTGGACTATTGATAAAATTTATGTTTCAAAGATAACTAGCTTATTTGAAGCCATCTATAATTTTCAGC
CCAACTGACTAATTAGGCTAACTTTTCAGAAAAGTTAAGTAAGTGTCTAATTTCTCAGTTAACTTACTACCTACTGAGTAA
AAATGTGCTGCCTTTTAAATCCACAATAACCTCCCTACTCAAGGCAAAACCCCTAGTTCTAATATTTGAAGTATTTA
ATGAACAAGCCTTTTGGGGGTCTCTGTAGTTAAAAATTTATTTTTCTCCTTTTTTTTTTAACTCTGTTTTTTGT
CTTTCTTTTTTTTTTTTTTTTTTTTTTTTTTGGAGACAGAGTCACTGCTGTCGCTAGATTGGAGTGCAGTGACACGATC
AGTCACTGTAACCTTGAACCTCTGGTCTGAAGCGATCCTCCACGTGTGCTCTAAAGTGTCGGGATTACAGGCATGAG
CTACTGTGCTCAGCCTCTACTCTGTTTTCTACCTTTTATTGTTGCAAAAGCAACATGTTTATTTTAAACAAATACTGGT
CTTCTCATCTTACTCCCTGAGATTTCAATGTTAAAAGTTGATTTGTGTGTTTCCACGTAAGTCTTTATAACAAGCTT
CTGCTGACACTCCTTGGCCAGCTTTCCATAAACACATCCATCCCTACCTATTAGGTTGAAGTGTACAAAATGCCATT
TTTATAGGTCCCACTATTCTTTAATACCAAGCCTCAAATTTAGCCAGACACTAAATGTCTGTTTTATATACACGCTT
TATTCATTCTTCTTGGTTTTGTTTTTGTGGCTTCACTTTTGCTGGATGGCCTCCACCCCCAACCCAGCTCTACTCTG
GCTGGACATTTTTTAACTCTCCTTCAAAGGTGTACATCCTGCAACTTCTTAAATTCCTTTTACATTCACTGTCTACATC
ACATAGTCTGATTGCCTATATAATACAATTTCTGTGTTTTAGTATTTATATGCTATTTAATACAGATGCCACCTGTTTTG
CTGCTTTTATTTCTCTGGTTGCTTGATGTTCTATTACCTTRACTAGACTTTAGTGCTTTCTAGAAAAGGACAAATGTGT
AGTATATCTGTACTTATTCAAGTGCTGATCTAAGGACATAGGATGTAATGTAAAAGTTTATTCAATGACTATTTCAAAA
TACAAAGTCTCTCTTTGATAAAGTCATTCACTAATACTGACATTTGCTGATACTTCAGACTGGAGATCTCGGTAATA
TTACTTTTTCTTGATAAATTATTTGATTATAGGAGGATTTAATATCATGGAAATAAATATGCAAAATGAAGTACAGC
CTAGGTTCACTTCCAGAACAAACCGTATTCTGAGAATACTTGTGGTGCCAAAATTTAGAGTGAAACCCAGACTATTA
ATGATGCTCAAGTTACTTTACTCCAACACAATAAGTACTCAGTGATTTGTTACRGAAATTCAATTAAGTCTTCTCAAGT
ATTTTTTTTTCTTTCTTTTTTTTTTTTTTAAATTATACTTTAAGTTTTAGGGTACATGTGCACATTGTGCAGGTTAGATACA
TATGTATACATGTGCCATGCTGGTGCACCTGCACTCACTCGTCATCTAGCATTAGGTATATCTCCAGTGCTATCC
CTCCCCCTCCCCCACCACCAACAGTCCCCAGAGTGTGATATTTCCCTTCTGTGTCCATGTGATCTCATTGTTCAA
TTCCACCTATGAGTGAGAATATGCGGTGTTTGGTTTTTTGTTCTTGCGATAGTTTACTGAGAATGATGATTTCCAATT
TCATCCATGTCCCTACAAAGGACATGAACCTCATTTTAAAGAAAAGTCCAATAAAATATCAGTCACTATTTTTAGATC
TTCATTCTCAATGTTTGTAAAGCTAATACTAATATTAGATTAATGTAATTTTATCAATATTGATAATTACTTAGTATAC
ATTGTGAACCTTTGTTTTTTGGATGTCAATTAAGGGTTATTTTCATGAGTTCCTAAGAAATAATTTAGGCCTTTTAAGGT
TATTTAACCTTTCAGTAGAAAATAGTTTCTTGTTTAAGAAAATGATCTCCATCTAGTGGACAAATTTTTATATTACAG
TATACAAAGAAAATATTAAAGCCCCTAGAATATCTCATATCAAGCACTTCTGACCTATTAATAAATGTTTTGGTTTT
AGTGCTAATATTATGGCTTAAAGTTGTAAGATTTAAAAATATCATAACTATCTAAATGACTTAAGGTATTTAGCAATA
TTTGTTCCTAACTTATAGTGGAGTGTTAAGACTTGCTTGATTTAATTGGAAAAATTATAATTAAAGAAAAATTACTG
ATTTATACAAATTTGGTGTTTACTCAGTTGAACCTGAAAAAACTAAACCAAACTCACACTTCTGTATCTCTTACATTT
CTGTTTCATGCACAGGAAGGAGGGGTATTTCTTTTTTAAAGTGTAAGCAATAAGAATATCTTGATATTAAAGGGAAATA
AACATAAACATTTCTACAGGCATTACATTACTAGGTCTCCTCATGCTGAAAAGCTGCCATGACTATCTTCTTAGAAG
AGAAATCTACTTTGCCAAACCCCCACTATTTAGAAGTTTTAATGTCTTCAGTTGTGTACTAAATACCTTCAAAAACC

TCTTTAAATACTACTCTTCTCATGAAAACCTCTCAGATATCCACGCCGTGAGTTAGTCAITTCATCCTTTATTTTTGTATCTT
 AATGCACTCATATTAAGTGCCTTAATAAATGCCTATTTAAGCATATCCAAGGAGAGTTTGGCCAAAGATCCCCTAATGTATG
 TCTATTGAATGATTAGAGACCATCCTCCCCTTCCAGCCTTCCGGGAATTGACAAGGTTTACATACATATGTGCTTAT
 CCTATTCTGGTGAAACAGATGTCCCCTGTTTGGGTGCCACATATATTTGTGGTTTATATAATCATGCAGTAGAGCTGGA
 AGGACTTTTAGGAACAATCGATGATTCAATGCAGTTAGCTCAGTGACTGGTCAATTAACTTTTCTAGGACCTGGTATCCT
 CGTCTGTAAAGTGAGTCTGTTTCGACTTGACAATCTCTCAATTGTCTCTCTGTAACCAAATAAATAATATCTATAAAGAGAC
 ACAATTTCTAAGAAAAATTTTAAGTTGGAAAAACATATTTACAGCTGCTCAAGATAATGAGTTTTCCCTCTTCTGTTTATT
 TGATGGATTATTTTCGGAGCCACTGTATTATTTGATCACAGATTCWAAAGTGATCCATGAAACATCTTCCAATCTTAGAGTC
 ATAACCTCTATTTATTAATGACTCCGATAAAGAAAAATAAAGGAATGTTTTAAAAATGAGCTAGTTAATAGTTTGAATAAAG
 ATTTCTAATGGGGAAAAATATTAATGACAGCAAAACCTTGAATTCACATGTTTATTTATTTCTTTCAACAAGTTTTTCTTTAA
 AACCACACACCTGCTGGGCTATCATAGCTATCACCTTCCCTCCTTAAGAACACATGAAAGTTGACTTTATTTTAATAC
 TGGTTGATGTTTTCTAGCTAGAAAGTTCTTTGTGGAAGTTTATCTAGATTATAAGGACATATGACGTTAAGAACTGTGTGT
 GTAGATTTTTTTCCCAGCTCTAAAAATATGTATTGTCTGAGCACAGTGCCTTTTTATTCAATTAATCATTTACTCAAGACACT
 TGGGCACAGTTTTTCAATGTGCCAAGAATACGCTGAGTCTCCATTTTGTAGAGAGCTCACAATCTAGGAATGGAGACCGGG
 TGA AAAACATTTTTCAATTCATTGTAAATCTGTCTATTAGGGAGTGGGAAAGTGCTTTGGGAGCGTAGAGAAAAGGGCCTT
 TCATAAAGCTCTGATGTACCAGGGTAGCCTTTTCAGGTGCAGGCTAAGTCTCAAGGATGAGTGACAGTTAGGCAGGGGAA
 AGGGGATTGTATTATTTAGGGGAGCAGGAGGTGAGGTGGTGATGGCCTGTGAGAAGGAGATAGTGCCTCAATATGAGTT
 GAGCAAGAAGTACCCAATAGCTGAGGATGGCAAGTTGAGGCTGGGGGCAACTAATTGCAATTGAGAGCAGATGGTTAGA
 CTGGCAGTCTGGCAAAGAAATTTTGACTTCATCCTGAGAGCAATGGTAAGTTACTGAAGGGTTTTAACTGAAGAATGA
 CACTGGAAAATGGATTCAAGACACTAATATAAAGGTTGTTATAATAATATAGGTGAAATTTGATGGAGACCTGAATTTA
 AAAATATTGGTAGTAGGGATGGAAGGAAGTGGGTACAATAGAAATTAATGCTTGGATGGATGTTATAGGGYAGGAGTGTG
 GAGGGAGAAGCCCAGGTTTTGGGAGAACAGCAATTAGGCACAAAATGGGTATTTGTGTAATCGAATTCAAATATTTGATGA
 ATTACTGTGTATTTGTTATTTTCCGAAAGGAATTTTGTACTTAGAAGATTATGTTTTGCAGAGTGTTTTCCCTTTTAACT
 GAAGTAGAGTTTGGAAAAACCTGTATCTTGTATCTGGTCAAGTAAACAACAGTATCCAGGAGAAACAAGAATGTGAAGTCA
 ATGTGTTTTTTCTTTTATGTATTTCAATATTTATCATATTTTATGGCAGAAATTAGCTGTAATTTTCATTCTGTCTAATT
 CCACTGTCAGTTCTCAGCTGACGCTAAATGCTTTTTTGAAAATATGAACATGTGAATGTTACAGCAACATAATTCCTT
 CTCCTTCTTTTACAGTTTTTGATGTGGACAATGGCAGACTCTGCGGGACGGAGTCCCTTGGATCCCATGACCAGCCCAGGA
 TCCGGGCTAATTTCCCAAGCAAAATTTTGTCCACAGCTCAACGACGGGAGTCTCTCTGTATCGATCCGACAGCGATTATG
 ACCCTCTCTCCAAAGTCTATGTCCCGGAACCTCCATTTGCCAGTGATATGTAAGTACAAGGGCAGGCAAGAGAGAGAA
 AACCGAGTAAATTTATATCTAGAGCTGATGACATAATAAACTAATGACTTTTTGTTTCAACTGTATCACTCTCCTCCAAT
 GTAGAAAGAAATATGAATAAAATTTATACAAGCTAGAAATGAATGGTAGATTTAACCTGAGTGCACTGTCACTCTTGATTA
 ACGCATGTATTTATTTTCCCAGAAAATACTTTATAGGAAAACCTGA
 GAAATTAATTTTTAATGAAAACCTAACACTTAAATCATTAGCTTATATTTATGTAGAGCCTGAGTTTTAGCTACCTAACT
 ACATGGATATTTTCTAATATTTTGAAAAGCTTTCAACTCCATTGAAAAGTCTGTGATAATAGACTGTATAGCATTTTG
 AATATATTTCAATTAATGTATGTACAGATGTTAGCACTGGTTTGCCAGATCATTTAAGAAATCTTTGTGGGACTTTGCC
 AAAATTA AACCAACTTTTAAGGATCATGAGAGGCAAGCACAGAAAACATTAGACAGACTTGAATATCATTTAAGATATA
 GTACAGCTTGAAAAACAATGAAAACTGACAAGCAGGTTTGAGATCCTGTACCATCACTAGCTCATTTTCTCAGTGCAT
 TTCATTCTTGTGGTAGTGTGCATGTTTTTCTACATAGGTCTTTATTCTCACTCAATACCTATACTATCATTTCTGTTGCAC
 ATCTGCCCTCTGTATAGAATCGATCTTCATCTTTCTCTCTTGGTCTATACATTTGTCCAATAACATTCACCATCTTTTCA
 TGACACCCATCTCAAAAACCTCATAACAGGCTGCAATTTATCTTATAAGAATTAGTCTGTATGGAACCCCTGAGTGTCTA
 GTGTTATTTCTTGCCATTCTAACAGAGCATCAGTTGTATTGCAATAGGCTCAATGAGGCTCTAGAAAATGAAATTATATT
 TCACTCATTTTTTACAAACTATGGTTGCTATTTTAGCAGTTGTATTATGACGCTACACCTTCTTCACTCTCAAAACAAT
 TTTCTATTCTTGTGGCCCTATTTTTTACATTTATTTTTATCTTACTTCTTAGAGTTGAAATTCATGACACTTACTTATTCT
 ATTCACACATAATGAGAATGCTTCTTGAGCAAAATATGGTGTATTTAAAGCTCTGAATCTGTGGAGCAGTGAGGTCTGGC
 ATTTTAGACCATTTGTAATAAAATATGGTGAGCACAATCCTTGAGGCATTTATCATGTACTGMAGGAACAGAGAGAGGAG
 ATGGAGAGTTTTTCCACCCAAGGGAAAAGATACAGAAAATACCGGGCTAAGGGAACAACATTTACTAAATGTGAGGCATGG
 AAAATTATGGCTGAACTAAGGAATGACAATCTGCTTGATGTGAATAGCGAAACCTGGCAAGAGAGAAGAAAATTTCAA
 TACAGTCTATGGGACCTGAGAGCCACAGAGGTTTTTAGCTGAGTTTTGGCATGATCATATTCTTGTTTTTATTGCATCT
 TGATTACTCTATTGTTGAATGATTGCATAGCGAAGTCACTACAGGGAAGTATTTTCATGTGCAAAATTCACAGAAGTAAG
 CAGGCTAAATATGATGAAGACCTAAGTCAAGGGAGTGATGGCAGTGGAGCAAAGAGCTGGTTTAGATGCAAGAGGCTTA
 TAGAATGGTTGAAGTATGTATGTATGTTGGGGGAC
 AGCCAGTGGAGAAGGAGARTCAAAAGAGAGTGCTGATTTTTGTCCATGAATGAGTACGTACATGGTGTATGTACGTACATG
 GTGATGAGGAACAAAGGGCAGAGAGTAGAAAAACATGACAGATAACAGGTGATGAATTGGTTTTGTACATGATAAGGCTAG
 GGGAAACAAGACAACAGTTTAAAGTACTGGGACAGCAAAACAGAAATAACAGTCCAGAGGACCAGGAGAAATAGAACAGTT
 ACCTTCTATAATTAAGTTTTTTGAATGACAGTTGAGTGGTGCGTTGTATTTCAGGTAATAGCATTAGGAGCCCCCTGGG
 TTAAGGAGTGAATTTGAAAGTGGAATGTGAGCAATGACAGGCATCTCTTTAAAGGCTGATGGGTGGAGTAGGAAGAA
 GAACTAAGCTGCCTGACAGAAATTAGTTTCAAGCGGAATTTTTTGAATTCAGGTTAGTTGAGCTGAGGGAAGGCTC
 CAGGAGATAGAAAGACATAAGAAATTCAGGGGGAAGAGGGTTTTAAAGATGGAGCTGTAGTTCTGCTGACAAAAACATGAT
 CATGAGCCAAAGTAAGGAGGCTATCCTTGGA AAAAGTAGTAAATACCAGAACTGTATTCTTTAGGAAGGCAAGAAGAGAC
 CTGCCCTTGGCAACATAGTGAGACCTTGTCTTACTAAAAATCCAAAAAATAGCTGGGCATGGTGGCACATGCCTTTAG

305/375

TCCCAGCTACTCTGGAGAGGTAGGAGGATTGGTTGAGCCTGGGAGTTGAGGGTTGCAGTGAGCTACGATCATGCCACTG
CAGTCCAGCCTGGGTGACAGAGGAAGACAAGACTGTGTCTGGAAAAAAGAAAAAAGAAAGAGGAGGAGAAAGGAGAAAG
AATAAGAGAGAAGAGAAGAAGGAGAAGGAGAAGAAGAGTAAAGAAGGGAAATGTAAATTTAGAGATGGAGGAGTAAAA
TGTTAAGAGATATTAGCCATGAGTTCTCTAAACATTTTACTCCTCCATCTCCAGATGAATGAATGTAAAAGTAGAAGGT
ACAGCCATCAATAGCCAGAGGAGAGAGGGATGGGGCAGCTTGAGAAGAAAGGGAAAGGCTTAAAAAGCCACTATGCAG
ATCAAAAAGGGAAACAGGGTAAAGGTGAGTAGAATACTGACCAGCCCCATAGATAACAATAACAATGTTAAATAGGCG
AATGACAGAATTGAAAGTCATCTAATGCAACTTCATCAAAGGTGAGTCAGGCTTGGTATTGACAAAAGAAAGAGGAAAA
CTCACAGTGAGTTAGTGGAGTCCATTTATGTAGTTATGTGTTCTACCTTTTTTAAATTGTAGTAAACTGAGTTTGGGATA
GATTGTTTTCTTTTCATACATTCTACTCCAGTTAGTAAATATTAAATATATACATATATTTTATGAAAAGCTTATAGCAT
TCATATTTTAAATAGAAATGCTTTTATTTTCAAATCAAACCTTGCAAGGATACCTCATTTTGTCTGTGTGCTTCAAGAGTT
CTTTATCTGATCAGACTCAGGTAGGAATGATGAGTTTAAATCAGACCAGTCAACACTATATTTTGTCTGAAAAGTAAT
GTGTWGATATGTTTAGCTTTCCATTCTCCTTGGATATTTACATTGGAGCAGTAAGATATTTCTTTTGATACCAACTCCTA
GAAAGCATTCTTTCTACCAAGGAGATTAAGTTTCTGTGGAAGGAAAAGGAAATAGAATAAATAAATACTATTTTCAACAT
TTAATCTGACACGACACATATCTTCCACCATAAAGGACTGTGCCTTCTCTTAATTTGAATTCTCATATGGCCATGTGTA
AACTTTAATTTTCTCACCTTACCTAGTTTACAATAATGCTATGAAGACTGTCTGATGTGTATAATTCAACTGCGCTTTA
TAGAGAATGATGTTATATATTTAATTACTTGTATGATTTCTTATTAATAGTTCTAGTTAAGCTTTTCTATTGAGAAATTT
TCTTAGAAATTTCAAATACAAACAGTACCTAATGAGGATAGGTACCTAATGAAGGGTATTTAAATGAAGGTTTGTGGT
TATCTATTTAATTGAAGTGTGTTTGGAAAACCTTTAAATACTCTTTAAGTTTAAATATAACTATTTACTCTATTGGGAAA
GTGAGAAGAAGGAAGATAATCCCTTCTAGTAGATAGGATATCGTCATCTTATCCTCTATAAATAGAAACCAATGAAAT
AGCTGAAGAACAAAACAGATAAAGATGGTAGTAATAAATAATCATAACATACATGGTGTGTGTATATCATCAACTTTCCC
AAGTATTTTTCACACCAGCTATCTTATTTGATATACTCACAGTCCTTTTGATAGGGACATTGTTATGCCATTTTACAGGT
TAGAAAGCCAAAGTCCAATGAGCTTAATCTTTTGAAGAAAAGCAAGCATTGTTATTTCTAGGAGCACATAATTTG
ATAATGCCATTGTAAACAAAGTACTTTATACTACTACAGCAAAAAGCTGTGAGAAAACAGAAGTAATGTTTGACCAAT
CATTAACCAATGAAATACATAGCAGTATCAAAATTTGATTAAGAATAAAATAAAAGCTCAAGGAGGTACAAAGTAAAT
ATGCAGCCAACCTCTTAGAGAATGTATACAAGTATATAGCACTAGGCTAAATTCAGAATCTAAAAAATTAGCTCATATAA
GGCAGAAGAGAAGTTCTTGACCACTTCTGCTCAGAGACCGTCACACAATTTGTTAAATATAGATGATGCAGTAGCAACT
TAATTTCTTAAGAAAAGTAAGAAAAGAAAATGTTAAGTATTAGCATGAGTCTAGTAAATAAATCATGAAAATAAAGT
TGATTACCATTAAATAGTAAAAATTTTTATAACAGTAGAACAACACTAGATAACAAAAGGCTGGTGTGCCCCAAGTGGTGT
CATGAAGTAACATGAAGAAAATTACAGCGTAAATAGACAATATTTTGTCTCTTAATATTTTTCAGCATCTGAATAACAA
TCACCTTCTGTGTTTTTCACATCATCCAGTAATATAGTATCTGTATTTGGAAACACATAAAGTTATGATACATTGCAAGA
TTAAGAGGAGAATTAGCAATGACAAGATAAGTAGAATTAAGTCACAAAAGCTATGAATTTATTAAGTATAAGTTACCTGT
CAAACACTTAAAGTTTTAAGAAATACTCAATTCACCTGGATAACTAATCCTCTATTCCCATCCTCTGTTAAATTAACA
CCAACACATAGAATGCAAGATGATCCAATCGGCTCTTCACTCACATTTCATATACATTGCTTCTACACACAGAATATGG
GGTGGGGTGAATGCATTGAGAGGGCCAGTGACGAGGAAGTGAGTAGATTTGATATACCATAAAAAGCTGGGGCATATTT
GGGAATCTAGCTAAGTTATCCCCAGGCACTATACAGATATCTCAGACCTCACTGATCAGGCCTTGGGGTGCCCCATTG
GGGCATTTTCTCAGCTAGTAGATAATACTCTCCCTACCTCCCATGTCAAACACTACTGTCTTTCTTTAGCAATTAACAAG
TCCCTCACCACCTTCTTGGGCCTCTAATGTGTGTTTTTCAGTCACAGCCACTCCTCTCTACTACTTTTGCCTGCTAAGTAT
AAGAGTAGTATTGCTTCCAGTCTGAGTTTGAAAAGGAAGAAGAAATCCCTTTATGTCAATTTGTATCTTTTATTCCA
GATTATTAATCTTCCCTGGTCTCACTAGGAAGAATATAAATAAAAAGACAGTTGCATTACAAAGGTTCTAATTCTCAC
TGGATCTACATGAAAAGTTTGTAGTCATCTCTTACCTAGATTGCAAGATAATATTACACTAATGAACATTTCAAAGCA
TATCAATTTGTTATCTTGAAAGCTTTCTTCCATTAAACCACAGAAAGAAAGCTACCATGGCCAAATCATCTCTTCCCAG
TTCTGGGTTTTTCCAGCTGGGGAGGTATCCTCACCCCTCACCTGTGGTGTAGGAGTGATGGGACTAGGGCCAGAGTT
CTCAAAATGTGCTCTGAGGCAACAGAGGGAATGTACATGGGTGCAAGCGTTATTTTAAATGTTCAAGAAAAACACGAAA
ACATCTGTCAACCACTGGAAGAACTAATAGCTTGGAATAGTCTCCAGTTTCCAATTAAGACCATGATATTCCTTTCTGT
GACACCATATCTTTGCAAAATTTGGGTTTTTCAGCATGCTGGGATAAAAATGAAGTGCTGAGCAGAAATCAATGTGCAAC
AAAAAATAAGGGAGGCAATGTCCAATCTCATTCCAAAATGAGAAATGACATAGTGCTCAGTGGGTGCTAAATTTGTAG
AACAAAACCTTATTAAGTTATTTGGACTTAACATTTTAATAATTGGAACATATTATTTATTTTGGCCAATGTGTTGCTGT
TATTAATAAATTTAGATATTAAGGGCACCATGTACTGAGAAAGTCTGAAAATATTTGGATTAGTTGTTTATTCATATCT
GAAGAATTAGAGCTAAATCAGGCTAGGCATGGTGGCTCACATCTGTAATCCTGGCAATTTGGGAGGCCAAGGCAGGCAG
ATGGCTTGAGCTGAGGAGTTTGGAGCAACTTGGGCAACATGGTGAACCCCTGTCTCTACAAAAAATACAAAAATTTGC
TGGGCATGGTGGTGGGCGCTGTAGTCTCAGCTACTTGGGAGGCTGAAGCAGGAGGATCACTTGAACCCAGGATGTTGA
GGTTGTAGTGAGCCACGATTGAGCCACTGCCTCCAGCCTGGATGACAGAGTGAGACCCTGCCTCAAGACAAAAAATAA
TGATTAAGATAAATCAGATCTCTATGTGAGACTATTTGAGAGAATTTTGTAGGAGTTAAAAAATAACAGTTTCCAA
GCTGTGAAGTATCTGATGTGCTCTAGAGTAGAGAATTTATCTTTTTCTTAATCTGTTAGGATCCCAGGTAGCCAAAAT
CTTTTTTTTATAAATGTGATATTATTTTGGTAATGACCTAGATAGACCAGGCTTTTTCTTCCATTGCTGTGTGCTGGCC
ACTGTTACTAGTATTATTCGGAGTGTTGATGCAGGCATTAATACTAGCTATTAAATCTCAAGAAGTTTATTGGCAAAAT
ATGCTAAGGTCACTGCTACTAGAATACCTTTTTTACTATCTTTTTGTTTTAAAAATTTCTGCTTTATTTGGTGCCATTTAT
TCAATCACTTAAGTCATTTTATTTCTGATTTAAAAAATGGGAGTTTCATGAATTGTAAATAAGTCTTATAAATTAGC
TAAACAWGTTTCTTCAATCCTTGAACCTGGGGGATTTAAAAATATTAGCTGAATAGGCATTTTATATTCTAATCTCATAC
TTTCAAAAAATCATAAAAATGAAATCCTGATGTTTAGACATTTTAAATGGTAATGTTTTTAAATGCCACAGTATAAAAA

306/375

[illegible]

307/375

[illegible]

308/375

CTAATTAACTGTATCTCCTTTTCTTATGATTTTCGTAATAGTAAAAACAGATAAAGATTGCCACCTAGTGTGTTTAAAGAT
TTCAACCAATCATGAAATGAACCTTCTATAGGAAATTATATTTTCAGGTGCTGATGTTGGTTGAACTTATTTTTTAAAGA
TGACAAACAGGCTTTTTTCATTTTTAAGTACTTGAACCATATATGAGTCTCAACAAAGTCACCATAAGAGTGTGGGCATTT
GGATTTCTTGCTTTTAGTTTTCTTGCTTGTTCCTTATTACAGAAAGAAAAGGGTAGAAAATAACGTGATAAA
TAATACAGAAGTAGAAGAAGGATGGGAGGGGGAATAGAGAATAGAAGTTCTGACTCTACTGTCAATTTCTTGTGAGA
AAAAAAAAGACAATAGTATAC'TGTTGAGCCCTGTATTCTCCTGCTTTCAACAGCGCTGGCTCAGGACTCAGCAAGTCTT
TCTCTTTGGGAGAGACAAGGCTCGCCAGGACTAGTGAAGATGACTCTGGTTCACTTCTCGGTACCAGGGAAGGTGACA
GAGCATGTGGCACCTCCTTGGACATCATGAAATTTAAAACCAATGTGACACTGACTCCACAGTGACCTACAGTGGCTC
ATCCTGGCTGTTCTAGAAGTTTCTGCACTTGCATTCTGCTGTGACTGTTACCTTGGTACCAATCTCATCTCTCACATAC
ATACATATGTGCATACATACATACATGTATACATGTGTGCATACATACATATAGACACGCAGTGTCAAAATGACT
TTTTTCTGAGCCTTCCCTATCCCTCATTCTCCTGCTGTCTCCATGAACACTCCAGTCTTTTTTTTTTAAAGAGC
TGTATTTTCTTAAACAGATCACAGCTGTTTTTTTGTAAAGGTTGTTGTTGTTATAATTGTTTTTATTTAAATGAAAG
ACAGTATTGCATCATCCTCACCCAAAATTCACATTACCAGGCGGTACAATTTCAAATGTCCAGGCGATATTCACTGTG
TGACTTTGAATCTAGCTTTTTCAGTCAC'TTTATAGAGACCCTAATAGTCTCTTCCCATCTCAGAAGAGACTCAGAAAAAT
ATTTAGCCAAGTAGGCCTAGGAAGCCCCAATTTATTACATTGTATTGTAATCCCTCCAGCCCCACTTTACGTGGCAAG
GCGCTTTAAAAAGCTTCTGTGGGTAAAGTTGTTTCAAGGTGCAAGATTTTCAAGATTATTTTATTTTATAGGATTTTTTTGA
GCATATGTGATTATTCAGTTTCA'TTAAACCCACACATAC'TTAAACCAATCATATTCACAAAGTGAATCTTCTGTTGA
TCTTAACTACCAGATCTGTTT'TTAAATGATTATAAGCAAAGTGTAAGACACAATTCAAAGATATGTTTGTATTATATTT
ATTTTCTTCTAACCACAAATAAAAAATAGGTTTTACTTGCCTTATTCTCCTAGTGACAGTATGTCTGAAAAGATCTGTTT
TAATATTGAGTTGAGGACTTAGACAAAGATTTTAAATTTATATGTTAGGTATATATTCAAAGATAATTTAAGCATGACA
TACTTTTGAAAATAAATGGATAGGCTATAACCTGCCGTTTATCGAGGACATCTGCCACTGAAATGCTAGGTATCATTTT
ACTGTTACTAAAATGAGACCATCTTGAGATATTTGGCAGAAACAATTTCTGGGCAATTTATTTAAAAAGTAATATATTTT
CTTCACTAAAATGATAACTGCTTTTATGCTTTTCATAGGGGAAAAAAGGCTGGTAAATTATCATAAATATTGTAAAGTGTA
TTACTTTATAATACTTTATAAAGGAGATACAACCAAAGAGAAAAATTAATGTTTTTAATAAATATGCCAACCTTTTGAGTTT
TGAAAAGATTCAAATCCACTGCAATCTATATAAAAAATTAGGAGACATATTTCCATGGATTCA'TTTCAGATTGATGATGT
GCCTTGTCAAGATGACTTAGTCTGAAAAAAATAAAC'TTTATAGTAGGTCAATTATAAAGAATAAAATGAAAGAAGAGA
CTATAGCTTGGGACAATAAGAAGATGTCATATTATTTTAATTTTGGTTATCTGAAC'TGCCCTCTCATCCATTTTACAATA
CAATGTCTTCAGCTTGGCCATGCACTGAAGCAGATGAATAGTTTATCAGACTGGCAAATCAAGTCGGCATAGGTGGCAT
GTCTTTTCTCCTTGTGTAATATACCTCCCATTTATGGAATTTTTAATAACATTTTTTAATGTCAGAAACCATTGAACAT
CTTGAATGCAATATATGTAGTATATACACCTATTGAAAATGTTTTTTGTCTTCGGACTTCTAACACACTACACAGTTTA
CTGATTTGTCCACCCTCCCAAGAATGTTTGGCTTCAAATGAACCTCTAAAGGTGCCCTTTATGTGTGTAGAAATTTGTCA
AATGCTGAAGTGTTTAGCTCTGGATTTTGTCTTCATGCTTTTTTAAACACTGGTGTATCTGTAAATATTTCTCAGTTGTT
TTGTGAGAGTTAGGCTACTGTTTCAAATAAGTACATAAGAGAAATTGCAGCCCTATATTTACCTATATGACACAGCCA
GAAGGGAAAAGTCAGAATGATGGGCCAAGGAAGAAATGTAGCTGGCCAACCTGGCATCACTTTGTAAATTTGCATTTATT
GGGCCATTTTCTAGAGCTTTATTTTAACTTTTTTAAAGCTGTTCCATAGGAATCAGCCAATGCATATCACAAAAGGGG
ACCATTCCAGGTATGGCTGTGCACTTACTACCTGCGTGTCTTTGTGTTAAATCTCTTAATCAATTTGAGCTACAATTT
TCTCATCTGAAAAATGGGAGTAATGTCACCTACCTTGCAACATTTGTTGTAACAGCTGATGATTGTATATAAAATACACT
TGCTGTGATAACATCTTTTTTACTTTTTGTAAATGCTTGAATTTTTCATATCTTTTTTTCCCGAGAACTTTTTCTTTCCC
CCAGAGCTTTTAATGTCTGTCATCGTCCCTCTCTCTCTCTCTCAACTACCACTGATTTAGTTAGGTCTCTATCTCTT
CTTTTCTCTCACTGGTCTCCCTGCTTCCATTTTTTGCCCTTTTAAAGCCCTCAATCTTTTATAGACCTGTCACAGGGTC
TCAAGAGTCTTCTTAGCGAAGTATCAGTTTTCTGAGTCTTTTGCAATTTCTGACTGCATAGGAAAGCAAAAATCATT
TGATTTAAAAAGGTTTTTACTACTGCTGCTAATTTATTTATAGAAATGTTTATTGAACATTTACTGTGTGGTAAGCAT
TTTTTCAGCACTTAACATTATTAATTTATTTGAATCCCAAAACATCACTCTATGTATGTGCTGTTATCTCCATTTTACAGA
TGAAGAGGCCAAGGGAAAGTGAAGTTTAAATAACTTGCACAATTTTACACACCTAGTATGTGGCAGAGCTGAAAT'TCCAA
CCCAAACCTCCATCAGAGAGTAAAAATCCAAGTTCTTGTACATTTTATACAAGGGCTCTGTGATCTGCTGCCCTGGCTCGT
TACCACCATGATTCTGAATTTCCCTGCCTTCCATGGCATTCTCTAGAATCACCGAGCTTCTCGTTGCAGCTCTGTATCT
GCTTCTTTCTCATCTAGGCAGCTGCTCTGCCCTCTTGGCTTCATCCCTCTCTGCTGGCTCCACGGGCTCAATGGCCTC
CTTGCCACTTCAGTGCACCAGGCTGCTCCTACCTGGGCCATTGTTCTAGGAAAGAGCCTTTCTGGGCTTGACCTCAG
AAGACCTTTTTTTTTTGGAGAGTCAAGGTAAATTTATGTAAATTTATTTATTTGATGACAGAAGAACTATCTTAGTCCAGT
TTCTGTTGCTATAACAGAAATAGCATAGACAGGGTAATTTTATATAGAAAAGAGTTTATATCTTACAGTTCTAGAGGCTG
GGTAGTTCAAGGACATGGCATCAGCATCTGATTAGGATATTTGGGATGCATCATCCCAAACAATGGA AAAATGGAAGGG
CAAGTGAGCACATGCAAAAAGAGAAAACATGAGGGGCTGGGCTCAC'TTTATAACAACCCACTCTTATGATAACTAACCC
CTCCCACCATAACAGCATTAATTCATTATGAGTGTGAAGCCCTCCTGACCTAATTACTTCTCACAGGCCCCCACCTCT
TAATACTGTTGCAATGGCAATTAACATCAACATGGGAAAAATACCTTTTTCAATTGACATCCTGCCTCTACCACTTATTT
AGTTTTTTAGACCTTATGCCCTCTCTGAACCTCAGTTGCCCTCTCTATAAAATGATCATAAAAACCAATGTCCCTACCTTC
TTAGAGTTCTAGAGTTCTATGAATAATCTCTACAAAGAGCAGGTGCCCTTTGAAAAACATGATTCTGGAAC'TAAGGGGG
TGTA AAAATAACACATGCTTCTTTTACATTTGTTTTTCTTCTGCTTTTATTTCCACATTTTTTATTTTCAAGATCT
CCACATGGTTTGATGACGACCACAGCCTATTCTAGCTATTGGTAACAATTTATTTGAGTAACATCATCCATATGCTCC
CTGTGCCCCAGCATGTTTTCATGGGTGTTGTTTTGGGCTCACTCAGGTTGTTTTTCAGATTGTTTCATGAGTGAGCGAAAAGT
TTATTTGCACTGTTCTCAGGGCCATGTCCAGGGAGCTGTCTGTGTTGAATAACAGCATTCAC'TTTTGATTAAAGAAATTT

Fig. 6.303

309/375

TATCTAGCTAGATCAAGAAATAGCTGATGGTGACTCTGGAAATCCCTTGCTCAAATTATTCATGCTAAGAAATACCACA
AAAGAACCTTGGGCCCCAGTTTCTCACTTTCCCTCTAAGTGGAAATGTTGCACAACTTTCCCTTGGCCCTTCCCTGTCCCTCC
AAGACACGTGATGCTGACACCTTGCTCCCATACCCAGGCACGGTGTAGCTGGGGTGTGCTGCAGCAACAGCACACAAGG
AGTAACATTTCCAGTGACTACAGTGGCTGGGATGAGTCAGTTGAACATTTCACTGGGTTTTTATTAGTGTATGATGCA
GTCCCATGTGATCTACAGTTCTTAGCTGTCCAAGACTTACACGGGATGATGTGGAACACTCCATGCTAATCACCTTCA
AATATTAGATGGTCAAGGGTTCTCTCACTGAAGTCAGTCATTGCTGGTTCCCTTCCACAGCACCCCTTACTAATATCTA
CAGTAAGAGGCCAAAAGTAAAACTCAGGCCCCACTGCTGGAACACCAATTTCTACTATTGCATATCCTGTGTGCCCTAAAA
AGCAACAGTGACCTGGCTGATGATCAAGAAGCCCTCTTTTTTACCAGGGAGTTGGACAATTTGTTAATCATCCCAGAAG
ACATATTTTTTAACCCAGTTGCTGGGAAGAACATGTGCTGAAGTATAAGGATGGAATCACGTGAATTTCTCTATGGGAAC
CATGAAAGTGGAACTTGCCGTTTAAATATTGAACGACACTGAGCACAGAGTTATTGATGATTTCTAATGCGGGATTGGT
TTATTTTTTCAGACACGGAGATGACTTGATTGTGACTCCATTTGCTCAGGTAAGCACAGCTTGGTGAATGGGCAGGTTTC
TCACAGATGTAAAAATTTAATTTGGGGAATTAGTTCGGGTTATTAATTTAATTTAATTTTAAATCAAGCACAGTACAA
ATACAAATTTCTGGTTCAATCAAGCAATTCAAAAGCAATGCTAGAGAAAGTGACTTTGGCTATATTAATCTGTTTCTTA
TAAACCCATAGTACCAAAGAGTGTCTTTGCTTCAAATAATAAATTAGCTAAGGGATATACTTAATTTGGGCTCATACTGA
CATAAGCACTAGAAGCAGAAAGGCTATATCATGGCTTAAGTTATGTTTAGTATAATTAGGTACATGATCAGTGCTTGAAA
TTCAATATTCCAATTC AACCCATACCTTATTTATCTCTTTTTTACATATGCCATTTGTGCAGAGATTTAGCTGAGTGA
TGTGTTGATGTTTACTTCTTCTTCTAGGCATACAAATCATGAAAATACTTTAACCACATGACATATGTGCAAGCAGGT
GATAACATGATCTAAATGTTTGGGAATATAAATATGAAAGAGTTGATGACCAGATGTTCTATGTATAGACCAATACCTT
CTCAACCCCTACCTGCACGTTAGATTAACTTAGAGACCTCTTATCCCAGTGCCAGGCTGCAGCCCTGGTCAATTTAAATC
CAAAAAATTTGGAGATCTGTTTACAAGCATCTGTATTTGTTAAAGGCCCTTAGTATTTTTCTAGTGTGCAGGAGAAGTTGAG
AGTCTCTGGTATAGACAACTAAGGGCGGAATGAGATAAACTGATTTAACCCTGGGGCATGAAGCAGGTTTAAAACCAAC
ACTGATGAGTAAGAAATGTTAAATATTTAAATGCAAGTAATCCTGAGAGGTTGTAAAAATTTAATCAGGCCCTATATCA
TACATCAAGGTGCTCTTGACACCTTGACAACTCACTTAAATTTCTGGGTCCTCTTTTTTTCACTGGTAGAGTTAGG
GGACTGAGCTGGATGAAAGACAGTCAGATCTAGTTAAACCCCTTTCACCGCCTCTTGCCAACTCAATGGACTTGAGCGA
GTCACTGAACTTTTCCAAGCCTGGTCTCTTCTCTGTTAAATAACAGTTCCAAGAGTACCCACCTCATAAGATTGCTAA
GACACTGAAATAATACCACGCTTATAAAATGCTAGGCACAAATGCTTGAAAAATATAATTTATAAAAACTTTGTGATTG
GTTTAAATAGTATAGACTGAAAATGTTCTTTTCAATTTTCAAAATGCTCATAGTATTTATTTTAAATGGATAATAGGGTT
TAGATAGTAGGATTATGTATAGTTTCTACTTTTTTAAAACTTTCCAACTTTTATTACTGTAACCTTAGACCTATAATATAA
TCAATTCATAAGTAACATAATGTATAATAGTAACTTTTTTAAATTAATGCAGGCAATTTAAAAATAAAATACAATCACCAT
CCTTTTCAGATGGTTAATATCTTGTGTTGCTGAAGGTTTTGCTGGAGATTATGAATTTCTTCTAGTACCTGTATTTCTGT
GTCCAAAAAATTTTCACTTGTATGATTTAATAATATGATGTGATAGCAAAATCTTATAAAGCTGAGGGTTTTTAATTGA
TTACTATTGAAAACCTTATGGCCGGGTGCGGTGGCTCGTACCTGTAATCCAGCACTTTGGGAAGCTGAGGTGGGTGGAT
CACCTGAGGTGAGGAGTTGAGAGACAGCTTGCCAACTTGATGAAACCTGTCTCTACTAAAAATACAAAAAATTAGC
CAGGCATGGTGACGGGTGCTGTAAATCCAGCTACTTGGGAGGCTGAGGCAGGATAATTGCTTGAACCCGGGAGGTGGA
GGTTGCAGTGAGCCAAGATCATGCCACTGCCTCCAGCCTGGGTGACAGAGCAAGACTCTGTCAAGAAAAAAAAGGAA
AGAAAAGAAAACCTTATAATTTCTATATCTAAGACCTCAGAGAGAGGTGAACAGACAAAATATGGCATAACAAATGTAAGTAA
CATCATCAAAACATAGAACCAATCATTTCAATTTGAGTTTCAATCAAGTAGCTATTCTTGTCTTAAACCAATGATCTAGG
TATTATTATAAGAAAAAATATATATAAAATTTTAAATAACAAATGAAAAAAGGTCTGTGTATGATATATGGTCTTTTACA
TCAAGTAATATTTATTAAGCTGCAACAAATAGATTAGTAAATTTGACTTGAACCTTGCCATCAGTGCTCTTAAATTTCA
AGGAAATCTAGTCTTTTACCTGATTAGATATTTCTGTAGTGTACCTATAATCTCCAAGGAAAAAATAATGGAATTT
TCAAGATATTGGGAAATACACACATATATGTAATTTAGTCCATGTTAGTAAGCTATTTAAATAAAAAAGATGTGTACTT
AATATACTTTGAATTTAGAACTTGGAAATATAAATCAGCTGTATAATTTATAGGCATATCTGATGCCTAAAAATAATCCCA
TAGTATATTAAGATCTTTGCTTTATGATTAGCTTAAGTACTATAACCACTTGTAGAGAGTGGTCATTCTGAGAGGCTG
CCGATTTTTTTTTAAGGGGCTTCATCATGGTTTTTCAAAATGGCCTTTTACTGGAGTATAAGACCTGGAAAGCCCCACTA
GAATTAAAAAACAAAACAAAACAAAACCTGTTAAGCCCTGAAGAGTTTACCACCTCTTCATAGAGCATCTGTGGGGAGG
GGTTAAGAGAGAAGTCCAGTGAGTATGTTTGAAGTGGCCTTCTCTTAAACCTGTTGGACATGATTGGCATGTTTTGCT
GACCCAATCACTAATCTCTCAAATTTCTTTAATACAAAGTAAAGCACTTACCCTTAATGGTAAGTGCTATTTTAGCA
TTAACTATTTAAACTAAAAATATAAGATACTTATGTCACTTGAAGTGATACCAATCTAATTTGTCTGATATACCATA
ATTGCTTTTACCAGAGGACAGAAAAAATGGATTTTGAAGAGTCACTCAGAAAAATATTTAGCCAAGTAGGCCAAAGA
ATTACCTCTTTTCTCAGCATGCTTTGAAAAATTGGAATTTTCACTAAATTTCCAGTGAAAAAGCTATGCTTCTCAAAA
GACAAAACAAAACAAAACCTTTTGCATAAAAGTTTGAAGAAATAATAAGAAAAAGAAAAGGAAAAATTTCTAAAATTC
CAAACCCCAAAATAACTGCTACTGACATTTTATTTTATATCCCTTCAGATTTATTTTCTGTGCATATTTTCTGTCCCA
TGGCTCTTAAAAATGGCCTTCCCCTGTCTAAGGTGTTCAAAGATCCCCTCCCAATCCATCTCATCTTCTGCCTCTTCT
TGAGAACTCATTTCTTTATGCCTGAGTCCATCTCCAAAACACGAATCATGGTTTCCAAATCATGGTTTCTTTGACGTG
AAAAGAGCAAAATCTTAAATTTAGAGGAGAATTTAGGAAGCCGTGCAAGATAGATTGCACTTTTTTGGCCAGGCTAAAG
CCTGAAACATCTTGGATAGTAATTTTCAGAAAGGATCCTATAGTATCTCTCCATAGTTTATCCCATTTGTCTAAAACACT
GTCAGGGCTAGAAATTTCTGCTGGTGTTTAACCCTAACTCTTTTCCACCTCTGATTTCTTATGCTTTCCCTGTAAAGCT
CAGAATCCCTTTGGTCTCAGAAAAAGTGACAGCTTTAAATATTTTCTTATTTCAATTGTTAAAGTATTCTCTTGTGT
TTGTGTTGAAATCTTTTGGTGTGGGTGTTTCTTAGCACGAAGGCTAGAGAGGAATCCCACTGGAGTGACGCGGCAAC
TGACCTTTTTTTCTTGGCCAGAGTTCTTGGGGGCCAAGGAGCACTAAGGAGGCACAATGCTGATAAACTGTAGGAACT

310/375

CTTCTCTGCTGTCAGCTGCCTCCGGGCTCAGTGATCCCGAGGATTTGTGTACACAACCTACCCTGTAGTAAAACCTCTAAGTT
GACTAGAAATTTTCATGTGGAAGTGTGTAATGTTAAATGAAGTAGACTCTGATGAAAGAAAGAGAAAAACAGGAAAAACCCA
AGCATTATGCTGGATCCCTGGAGAAACCCCTCACTTTCATTTCAGACTAAGGAGATATCCCTGATTTGAAAAACACAGAGGCG
GGAGAATAACTTGAACCCAGGAGGCGAGGTTGTCAGTGAGCCGAGATCGCGCCATTGCACCTCCATCCTGGGCAACAAGA
GCAAAACTCCGTCTCAAAAAAAAAAAAAACAAAAAACAAAAAACGGGGTAGGAACAACCTACATCTCTTTACCT
TTACTCTAACCAAAATACAGCACCTGGGATACTTCTAGGATAAAAAATGCAGTAGTTATTAATACTATAGAATATTACCA
TTTAGTTGGTAATAAAATATAACCAATATTCTCATATTCTGCGCTGTCCCTCAGCCACTTCACCCAGCAGCAACGATCT
TGTGGCCTCATCACCATCTCAAGCTTGCAGACTGTGCTAGGCCCTCCCTGCCAGGCATGAAAGAAGATAGTCACCTC
GTTTCAGTCGGTGCTAAATTTTTAGCTTTTCTTAGCCTTAATTAATTTAAATTTACAACCTACTATCTTCTGGACATCTA
AGTTCTTTTTAAGAGCGAACCATATAAAATTTGCTATCAACCTTTTTCTGGTGTACAAACCAGCAATTTTCATAGGGTTTA
AACAAAACATAACCTGGAAAGAGGTTTTCTTTTCATAAAAAATGACCTTTCTATTTTGTAAATAAGCATAAATTGACTCC
AGCTTTTTCCGGAGGTAAAACCGAAGTAATGAATCTCTCCAGTGCGGGTCGCCGCTTCCCTCCGCCGCCAGTGGCACCT
CAACCTCATGGTCTGTGTTTTACCGCCATCTAGTGGTAACAAGTGTATATGGTTATGAAAAACAATCCTCGAAACCATT
TATTTTCTCTTTTTTTTTTAGGCTATGATGTTTCAGCTGTTTAAAGTGTAAATGATAACCGTATTTTCTGCTATTTTCA
GTGATTCTTATTGTTTAAATAAATGTTTAGAAGCACCTAAGAAGATCCGAGAGTAGTGTACGTAAATAACATTGAATCCT
TCCCCATGGGCTAATACATGAACCATCTTTGCTTAAATTTTTCTGTAAACCTACCAGTATTTCTTCTTAAGGAATAT
ATATTTCTCATCATTCCCAATGTAATTTTGACATTGACTGGCTATACCTTCTGCTTGGTGGGGCAGAAGAGAAAGAAATG
ACCTTAATTTTCTAACCATTTGAGCTCTGTGGAAGAAACGTCAGGGATCTTTTTGGTTAGCAAGCATTAAAGGAGTAAGGA
CAACTGTAAAGGAGCCTTAAAGCTTTGACTACAGTTCTTAAAGAGTCGAATTCAGGGGAAGTGAGGGCTGCCCTGAAC
AAAAGCAAAGAACATGGAACCTTTAACTTAGGGGCTTCAGTAAACCTGTTTATAGTTCTCCCCACAGCCTGCAGTAACA
GATGCTCCCTCTTTGTGCCCTGCAATGCAAGTGAAAGCTTAAAGACTAACACAGTGATAACAGTGATGACGACACCA
AGAGTCAGTCAGCGAGGCCCCAAGACAACACCCCTTATAAGATTTGTCTAGAAATGTTATTTACACTTCTGCCAATAGC
ATACATGTCATCTGTAGAAGATAATAGTTAACACCAAACATAAAATTTATAAAATAGTTTGTCTGCTGCAAAAGAAA
AAAAAACCCACACACACAATAAATAATCTAATACTGGCATGCCCTAGGAAATAATTTCTCTACAAGATTATTTATTGTC
AACAGTGTTTGTACAAAAACAACCTTTAAGATAGAAAACCTAAAAGTTGATTGCTAGTGGCCAGGCAGCTGATTGTCTGA
AGGAGAGACCGGAAGACAGATTCTTTTTTCACTTTTTTATTTTGAAGTATTTTCATATATATAAGGGAATATAGCTTGTA
ATTATGTAAATATAAAGAATAATACTAAAAATGAACAGTTTAAAGAAATAGAACAGTTATCAGTATTTTAATGTCCCTG
AGTGTCCCTCCCAGGTTAATCTGTTTCTATTGCGTCTTTTCAGAAGTAATAATAATTTTGATTTTTATCTTAATCATT
GAAGGGGAGACTTTTTGCTTTATACTCTTTTGTAAATTTCTGAAGCATGTGAAGATATAAATTATACAAAAATACATA
AATTTTAACTAAAAACAAAGACAAAATAATATTAAATTAGATTACTTATTAAATTAGAAGTTTATTATAATAGAGGCA
AAAACCTCTCTACAGAAATTTTTCTTTGATGAACATAATTTTCTTTTCATGACTGATGTTTCCCTTCAAATGATCATA
GAAATAAGTTGCCTGCATTTCTATGCTATTTACCCAGCTGTCAACTGCAATGAACCTAACTATTATGTATTGGAATA
AAAATCTCAGAATTCTAGGGTTAAAAATTTTGCTTAGGAAGGGGATCAATTAGCTGGTGCATGATTTTATCTTAAAGT
TTCCATTAGTATGTTTGATATTCACTTCTTAAAAACATAAAATTAAGCCTGCATGATTTAACGACAGTGGATCATTATCC
GATTTACTTCTGCATCATTCAAGATTTTCATGCCAATGAAAGACATCGTGGTCTGATGTGACAGTCGGCCATTTGAAT
ACTCCATCATAGGCAGCGTGACCTTTTCAGAGCCGTGGGTTGTTTATATGAGATAATGAGCCAGGTTTTTCCAGTGACTG
AGTTAATCACGGTTGGCTTCTTAGGAAGCAGCATTAACCTCCTTTAGGGGAAAAATTTCTTAAGTCACTGTCCCAAGGCGT
ACACAGCTCTCCATTGACTTACACAAATGAATGTCAATTTCATAAACAGCAACAACAAAAACAGAGTCTGGGACATTTTT
GTCTTAGAAAAAAATTAGACTGATTTTAGTCTAGGTCTGTGCCAGATGAAACATTTCTGAAAACAACTCTGGAACTT
TGAAGCAATTAACCTTTGGAGACTCTTGAATTACCAATGTAGGCATTAAGTAAATTTCCCAAGTGCATGCCAAGTCA
TTAAGTCAAGAGTAAAGCTGCCATCATGGCTAATATTGGCTGAATGCTTCTATTGTCAGGCACCTGTTCTTGGCACC
AAACCTGTCTATTCATATACTCTCACAACAATTTCTACGAGGTAGGTATCACTATCCAGTTTCCAGGTTAGGAAGCT
GAGGTACAAAGAGGTTGCATATCTAGTCCAAGTTTACACATTTACTACATAACAGAGCCAGCAGTCTGGGTTGTTAGG
TAATACCTACTCAGACATTTGGAATCTGTGTTTTACATAAACTTAGCACTCTAGCTGTACCCCAAATCACCTATAATCC
CATCTAATATGGGTTTGACCTGGGGAACTTGCCCATTTTCAGGAGAAAGAGAGGAGGGAAGAGAGATAAGGCTCTA
GGAACCTTCTCCTAGGCTCACTTCCAGTCCGTGGCTACTTTCTAGTTCCAACCTGGAATTAGAAAAAGCGACTGTTAGA
GATAGTGACACCTATTGGTCTGCTGTTATGTGTGTGGGCATGTTGTGTCTATGTATTCTATTAGTCAACAAATTTT
TATTGAGTATCTTCTGTGTGCCAAGCATTGTGCATGTACAGGGCGTAGCATTTTACATAAGAAACGCATCCCTGAGAGC
TTCTTACAATGCACAATTCAGATAACCTTAACAAAAGAAAACAATGTCTGCTTACTAGCTAGAGTAGCCATGTGGCAAA
GGTAGAAAAACAGTTTAAATTTCACTTCACTTGCCAACTTATTATTATGAGATTCTTCATCAATTTTGAAGAGATTG
GGAGTAGGGAATTTTTATCCCTAAAGTGAGCTTTATTAGCATTTTATATTATACTATTGAAATGTGCAAAAATGCAA
TCATGTTATCTGTGATTGCTGGAATATTGTCTTGGTGACTAAGGAACCCAGAAATACTGTGGAACCTGCTGCTACTG
TCACCATGTGCATAGACAATGTGGAGGGATTTCTGGAAAAATTTCTGCAGTCTGGCCTCTCTGGATTTCGTGTGGATACC
TACAAACTGCACTAAGTGTTGGGAGATTCTTTAGTGGTATATGAAACTAAGTTGCAAGCAATATCAAGTTTTCTCTTAA
CAAACCATTTTCAAGTGATTTAAAAATGGCCTTAGCTCAAGAAGTTTCAAGAATCCTTTCTTGTGTAGGTCTTGGCCA
GTCTGCGAAGTGTACGAAACAACCTTTGCTGCATTAACATAATTTGCAAGATCGAGCACCTAGCAAGTAAGATATCCTTTT
TTCCCCCTCTTTTTTGTGTAACCTTTTAAATAAGTTTTCTCAACTTGATTGAGCCCAAGGCAATATGTTAGACTTCTCT
GTGTTGTGTCATGTTGTCTGTGTATACTAAGTCATATGATGCTCTGTTAATTTTCTATAAAATACTTCTGTTGATGGT
TCTAATATCAGAAATGAAGCAGTATGACAAATAAATATGGTGATTCCATCTGTGAGAAATCACCTGGCATGATCAGTCC
TCCGCCAGTTATTTACACTCAGGGTAACCTTTATAGTTTTCGGCTTACTTCAATAATTAACCGTGGGTGAATAATCTCAT

311/375

CACACCTTAAGATCAGCTGAAAGTCATCCTCTCAAGACAACGATGATTTGGAGAAGCGCCATATCATAGCAAAGATCTT
TGATTCTCCTGCTGTTACTGACTTTTCAGATCAGCAGCATTCATGGAGCAATTAATAGAATTGTGGTTTATATGACAACA
GGGAAAGCATTTGAAAGATGGGAAAGGATTATCATTTTCAGGTTCTTGATAAAGGCCAAAAAATCTAAAAAGATAAAAGT
AATTTTTCAATATTAAATGGAAAACCTGGTTTGTCTGTTATTTCAATGTCCATTTTTTTAAAAAAAATCTGCTATTAATAT
GAAATAAAATATTAAATGCCAACTTCAAATAATTTTCCAGAAGGAAAAAAAACATTTAAATCATATTAAGAGGATAGT
AAATATAAGTGTATTAGGAACTATAACTTACCTAAGTGCATAACATTTTCATAGTAGTTACTACTTCTTAAAAACAATGA
GAAATCTGAACTTTACATTTTCATAGTAATAAAATTGACCTCCAGATTACAGTTTTTTCATTATCAAAAATAGCTCTGGC
CGTTATTCAAGTACTTCTTGTGATAGAAAAAGTTTTTAAAAATCAATATAAATGTAACAATGCAAGCTATTGGAATGG
AACCCATTAGGTTCTGTTTTTCCAGGTAATGAATTTTTGCAGTCCCTATTCTCTCAGCCTGAATACTTCTCATCTTCTTC
TTCTCTCTCATCTAGCTGGGATAATTGTCAATTCATTTTGTGTTTGCAGCTTAAATAAAATTTCTCTTGGAGCATTTGT
CCCTGATGATACCCAACTAGACACACCCCAAGCCCTTAATCAAAGTGATGTGCCTTTCCATCTCTGTCTGATTGTA
CCTTGTAATTGATTCTATGTTAGCACGTAGCTCTCTGTGCTCCTGTTGCCTGTTTGTCTGTTGGGATGCTCCTGAACA
CTGTCAAGTTCCAGTGAGTAGGAATGTAGTCGGTTCCATTTGTATTCCCTGTGCCTAGCATAATGCAGAGTCTATCAG
TCTGCAAAGGCCTGTTTCGTGAAAGGGCAAAGTAGTAACTCAGCATGTAAATCTGAGGGCATGCTTTGAGGTACCTGT
TCATTACCAATCAGTTTTTCTATGTAACGTGGCCGTGCAATGTCATACTGACCTCAGCGGCCCCCTTGGGCTTTGGGGA
TTTGGTAGCTTGTAAGGTCAATCACCTCCCCCTTAGAAAAGTCTCAGCTCTGCAGAAGAAATGAAGTTAACTGGTTGTCA
CTCCCAAACTTTTAGTCTCGAATTTTACCCAGGAACTGAGATTTTTGTCTTTAAAAAGTGAACAAGAACTCCCTTT
ATGCTTCTTTACATGTGGTCACCTGGGTACCAGCATTTAAATCTGTGGCAGGTAAATAGTTGATCAGTCAGGCTCCAG
AGACGATCTGAGGCCTGTTTCTATGCAAGACAGAAGTTTTTCAGCTGACATACAGGGATGGAACAGATTGAAATGGAAAG
GAGGAGCTAGAAGAAAACAGAAAATCATAGCTTTGAGCCTGAACTTCTCTCTGCCTTGTCAATGCCAGGGTGACATCT
AACCAAACAGTATTATCTGGCAGACTCTAAGTAAAGGCCACTGTGGTCTTCTTTTGGTCAATGCAAATTTGTGCCCTCC
ATTACTGATTCAAACCAAATCGGCTTCTTTGGGTATCAGAATAGTAGGATTCAATCTATTTCACGGCTAAACTCGATTCT
GTTTCAGTGAGAACAAAGTGCTGTAACCTCTGCCTCATCACATGATGACCCCTGGGAGAATCAGAACCTTTCTCTGCTGGGCA
CTCACAGAGCCACTAGAACATTTCCAAGCTCATCCTTGGATTTTATGGAAGGCATGTGCTCCTTTGCACAAGCCACCCT
TTTTATTTGCTGCAGAAAAGGAGTCTAGGAAGAATGCATTCCAAACCCAGCCCCCTGGGTGGGTATTTCAGATGCACATTG
CTGACTTGTTAACACATTACTGCTTCTTGTCACTTGGGTTTTTGTTTTTGTCTTGGCCTTGAGATTTTTTATTCCAG
AAGTGAGTTCTGGCTCATCTGTCTATTAGAGGAGTATCAGAGCAACCATGGATCAAAGTATTAAATTTTTCTGCTTGGC
ATTACTTGTTCAGATATCAAGTTCCCTGAGTACCAGTTCTAATGTGAGATTGATAGTAAAGGAGATAATTAGAAATTGAGT
CAACCATTTGGTTTTTCCAAAACCTGTAGAAGAGTGTGAAAAATATTTATTTAATACCATTCCCAGACAAAATCAATGGTTT
CTAAATTTTCACAGAGCAAGGACTAAAAAGGAGTAATCAGGATATCAATTTATTTGAATGATAAACTCTTAGCCAGAAGG
TAACAGATAACACCCTGTTACACACAGCAAGACCCCATCTCTAAAAAATAAATTAATTAGCCAAGCATGGTGGCAT
GCACCTGTAGTCCAGCTACTTGAGAGGCTGAGGTGGTGGGGGGAATCACTAGAGCTCAGGAGTTCTAGGCTGTAGTGA
GCTATGATCACACCACTGCACTCCAGCCTGAGCAACAGAGTGAGACCCTATCTCAAACTTTAAAAAATAAATTTA
AGAAGAAGAAGATAATTACTGGTATATAGACCAGAGCTATTTTCAGAGCAGCTGCTTAAATATTAATATTTTGGTTTAT
CGAGTTTAAATTCTCCCCATTTTTTCCCCCAACCATTTTATTTTATACTAAAAAACTAAAAATAATTCAGAAGTAAAA
TTTGGTGCATTTTCAATCAAACACAAAATTTTAAATCCCAAATCGATACCAATAACCTTAGGAGCAATGAAAGGGAGCCA
GAGGCTGAGTGGAACCAAGTGAGAATTTACAAAATCCCAGGCTGCTTTCCCCAATTTCCCCCACCTTGCTAAGAAATTC
ATCATCTCAGCAAGGCATATTTGAAGAGATTGATGCCATTGGCACATATGTGAGGCTGTGCATGCAGGTTCCACAAAAA
CATCTCAAACCTAAGGCAGCAAAAGCAGAGCATAGACCCTAGGATCAGATTTCGTTAGTTCAAATCTCAGCTTCGTTACTT
AAAACAAGTTCTTCAAATCTCAAAGTTTTGTTTTTCTCATTGGTAAATGAGAACAAATGAAACTTACTTCTTAAGGC
TTATTGTAAGGATTCAATGAGATAATTCATTTAAAGTACTTATTTAGCAATGTCTGATCCACAAGAAGTGTTTATTAAG
TGTTACCCCTTGGTAGAGGCAATATATATATAATTTATATATACCTAATATATATATATATATATATATATATATATCAGA
CATCTTTGAATCTATAAAGTGTTTTTAAATCATTAATTTTAAAGCTGTCAAGTACAAGTAACACTTTTATAAAG
TTATATTTCAAATAATGTTGATGGATCTTTATAAATGATATTTCTTTCAACATAATTTATTAAGCACTGACGGAATACT
GGATGCAATTGTGCTAGGCTCTGTAGGGAATATAAGTTAATCAGACAGCATGCTTTTTTTTTTTTACTTCAAGGGGTTTAT
AGTCATTTTGTGGAACCTTGGCAAACATCTGAAAACCTTAGAGAACACAAGATATAATTTATTTAAGTACCTTTGGCTTAG
AGTATTTCTAAAGCTTCTATAGTATCTATTTGGACAAGTCATTAATATACCTCTCTAACAAATATATCAGAGGTGTTTT
TCAATATAAGAAAAGAAAGGAAAAAGTTCAAATAGCTTCTCTAATTATAAGATAGTTTACAACAAATCATTCATCTCTG
ATAATGTACAGGCAATCAGGAGAATTTAGGCCAACATAAAATTTCTTAACCTGTATTAGGGAAGACAATTTATAAAT
TGACTGCTTTTTCAAATTCAGAGTCTATAAGCTCTGGCTTCAGCGAATAAAGTCTGTAAGAATTTCTCTTCTCTCATG
TCCAGTGACACTTACATCAGCTTTATTTACCCCAATCAATCACTGTGAGATTTACCAGTTTTCTTTTGGACATGTG
TGATCTGAGCCATAATACAAAGAACGCCTAGGGACTTGTCTGGCTAGTCTGAAAGAAATCATTTGCGTGTCCAACTTA
AAAATAATCTTTAAAGTAAATGCTATATCTGAAATGACTCAGAGAGTGATCAAATCAATAAGCCCCACATATTTACT
GCTTGTGTTTTTCTGTCTTTGTGCAAGATCACCCATGTGCAACCAACCATCCATCAACAAAGCCACCATAACAGGTA
AGAAAGATCTGGAGCTTATTCTTCATGTGTCTAGGAAGAAACCATTTCTGCCAAGAGTCAATATAACACCAACACCAAT
TTCATGCTGCAATTTGAAAATGTTAAAGAAAATCTTTCTTCTCTACATTATCATTTCTATCATTTGATCTCACAAATTTGT
CTAAGCTGTTATTTGGAACATTTTTACCGATTTACGTTTTTACTGATGTACATTATTTTAAACATTTAACTATGTGC
TTATACTCATTTGAGCATTGCTCTGGGCATTTGTATTTTGGAGAGATGATGTTACTTTCAAGTCACTTCCCATCTGGTT
CCACACATGTGTTATTAGCATGATATAATATGTCATCATTTAGTTTAAATAAGAGTGAAGGCATAAATAAAGGAGTAAC
GTGTTGGTTTCATCAATATCCCACTTGTGTGTAGGAAGCAACATTGTACCAGTAGTCCAATAAAGGACTGAGAGAGCTGA

GATAAATCTCAGTTTGGGAGGGGAGAGAAGTTAATATACAATGCAGAAAAAGTTCAATGAGATCAAAACGTTGGGATCTT
 ATAGATGTTTTGGGAAAGAAAAATAGGAGGAAAGATGAGAGGAGCCAAAGTGCATAAAAAATAAAATTATCTCAATTCCCTAT
 TAGTCTGTTTTAGGCACAGGACTTGACCCAGCTGAACCAAAAACAGAATGCATGATCTCATTTTGC'TGAACCTGAAAC
 CAAATTGAACCTCTTTTGACTATTTCTTGAAACCCCAATTGATTCAATTAATAAATTGCC'TGGAAAAGAAAACCTATGTT
 TTCTAAAATTATTACCAGAAGAAAATTAGCATATTTCTCCAAACTAAAACAATTTCGTCAATTGGATTCAAGTGTCTTCCTT
 GAGCTCCAACCCATAATGTGCTGAGGAGCTCTTATTAAGTTATTAGTGAGTACACTTTGCTTGAAATTTAACTTTATCA
 TGTCCAGACGTCTGTCTGTGTTTGTGGTCACCACATTAGAGTTGATTCTGGAATCATTGTTAATGTCATCTTTTTCTGAA
 TGTCAATCAAGTGAAACTTGTATTTCAATGAATGTTAAATTATTGATCTCTTCTTCATGTTTTCTCTTTCAACATATTATT
 GGTGATGACTTCCAATTATCATTTTTATAGTACATATATGGTTAACCAGTTTTGTTCTTGATATTGATCAAGAGATGAAC
 AATAGGGCCAGGAGTGGTGGCTCACGCTTGTAATCTCAGCAC'TTGGGAGGCCAAGGTGGGTGGATCACTTGAGGGCCAG
 GAGTTCAAGACCAGCCTGGCCAACATGGCGAAACCCATCTCTACTAAAAATACAAAAC'TTAGCATGGTGGCGAGCAC'
 TGTAAATCCAAGCTACTCGGGAATCTGAGGCAGGAGAATCGCTTGAACCCAGGAGGCAGAGGTTGCAGTGAGCCGAGATC
 GCGCCACTGCACCTCCAGCCTGGGCAACAGAGTAAGACTGTCTCCAAAAATAAAGAGAAAAGAGAGATGAACAATAACAA
 TTCTCTATATGCTAAAAATAAATCTTTGAGTAAGTATTCTTCTGCCAAAATTTCAAATTAACATAAAATGAGTCTAAAC
 TGAGTTGGAGGTGTGGAACCGGATCCCTCTGTTTTCTATGCAC'TTTCCTAAGTTGAGGAATGGACAGGCCCTACATTATTG
 AACCTGTACCTGAGGCC'TCTAGTGAGAGAAGCCACATGGAAGCTGGTCTTTCACGCTGCTCCAGGCAC'TAAATCTTGACCC
 CTATCAAGAGGAACTACCC'TCAACCCCCAATTTTGCATAAAGCAAGAACTGACATTGCTATTTGGGCAGAAATGCAGTGC
 TATTTTGGTCCCTGGAAGCTTTTTTAGCTTGAGGTCACATATGAGCTGGCCTCACAGGTGGAGCAGCATTTCTCCAGAA
 GAGCAGCATCAGGTACCAGTGGAATTTGTTGTGGCTGACAACAGATGGTTGGGTGCTCAGTGGTCAGGGCAGCTGCCCA
 GCCATCCCAGCAGATGCCAGGCACAGATTAACAGGAGAGAGTAGCTACACTCAAAGGGCACACACTTGATCTTAAGCAT
 ATGTGACAGACCTCATAGAAGCTCCTAGAAATGTATACATAGTAAGGGGGTCTTGAGCAATACCAGAGGGAATTATGA
 GCCACAGAAATTAAGAAATTAAGGTGAATATGGCCTCATTTCGTACCCACAAGCTCCTGACCTGAGGCC'TAGGGACAAGG
 GGGACACAGAAATACCTTATCTAGAAAGGGAAACTAAATTAAC'TGTTGTTACCAC'TTAGTGCTGCTGGGCTCCTCACAAA
 GCACAACAGGAAATGAAC'TGACTAAAAC'TGGGAAGTCGTTTTTCTTGCCCAAGCATAGCAAAACCAAGGTGGGAACATGG
 CATAGGGATGGAGGGATGAGGGCAGTAGCAGGGGAAGGTTCCCTTTCTGAGCCCATTTTGAAAAAGTGGGCCCTTAA
 ACCTCAGTGCTAGTAATAATAATGATGGTTGAGATTTTGACATTAGTAAGATTTGAGACACTCAGAAAAGGCAGTGCTT
 GTGCC'TTCTCCTCTGTCAGCTGACCAC'TCAGGCCCCACCCTCTAGGCTCACTCCCCCTGAAGTTGGAACCTGGCTGT
 ACTGTGGCAGTAGTCTCTGGGAAGGGCAAGAAGTATTAAGAGAGTCAGTGAGGCACCCTTAAGATGAATGGGTCCCTGT
 TTGATAGGGGTACAGACCTAGTGCCTGGAGCAGCATAGGACCCAGCTTCCATGTGGCTTCTCTACTAGAGGCCCCAGGT
 ACAGGTTTCGCAAAATGTATGCC'TGTCTATCCCTCAACATAGGAATAAGGTTAGAGTAACAGTGTAGCCTAACAGTTAAG
 TTCATGGCTGATCCAAAAGGCTGCTAGAGCACACAGCTCCAAGTGCC'TCCGAGGGGCAACTCCACAGAAACATCACAA
 TGGTGGCCCTTAGAATTTATACCAGTGGTTGCTCTGCCTACCCAGCACTCAAATCATGCTCTATCATGAGAGCTTTGTGG
 CCTGGGCAGGTTGCATACCC'TTCTCTGCTCAGTTTCCCTACCTATAAAATAGTGACACTGCTTCTGTCAGTTGTTGC
 TGGCTTGAATGAGTGAAACGCATGATGCCCTTAGCATAGTGCTTACAGAACCCAGCACTTAATACATCTTTTTAAATT
 CCATTTTGTGTTATTACTTGTTTTTGTCTTAGGGCCACTGTATACATAGAACTAGGGGTTTCTTCATCAATTCAGG
 CTGCCATAACAAAGTACCATAGACTGGGTGGCTTATAGACAACACAAATTTATTTCTCACAATTCTGGAGGCTGGAAGT
 CTGAGATCAGGATGCCAGCATGGTTGGGGTCTGGTGAGAGTCTTCTTCTAGGTTGCATCAGTGCCCTTTGTAAAGGCAC
 TAGTCTCATTTGTGAGTGTTGAGTGCTCCACCCTCACGACCTAATCACCTCCCAAGGCCCGGCTCCAAATACCAACA
 CATATTGGGTTAGGATATTGAAATGAATTTTAGGGGCACACAAGCACTCATTCGGTAACAAGGGGGTAATGGAAAGAAT
 AGGACAAAAGACACAAACGAAGGAAAGGGAACAGTGAGAGAAAAGGCAAGCTTGCAAGATCATGAGAGGAAAACCTGTGGG
 TCCTTAAATTGGCCAAAATGGATGCGCTTGCTTTGTGCCCATCAAATGGGGTCTCCTCCTGCTCCAGCACTGTCTCC
 TTTATTCTCATCAAAATCAGACAGCTGGTAGCTTTGTGATAGAGATGATACACTGTTGTTGAGGATGAATTTCTAAG
 TCTAAGAACTCACTTTTGAGTCTAGTTGTTTGAAGGAGAAATTAATTTCTATCACTTTTCTGTAACCAACTCTA
 ATTTTTAAAAAGAAAGAGTTAAGAACTTCAGCAGTCTACATATCACATACCATGCTTTCTAAGGAGTTGTCACATAGAA
 TTTACAATACCCCTCTTCTCTTTTTCAAGGTTATTGCA'TTGACATGTATTAAAGCCAGGAGAATTTGATTTTTTTTTTT
 TTTTCTTGAGATAGAGTTTGTCTTTATCGCCAGGCTGGAGTGAGTGGCGGATCTGAGGCTCACTGCAACCTCCGC
 CTCCTGGGTTCAAGCAATTTCTCTGCTCAGCTCCCAAGTAGCTGGGATTACAGATGCCACCACCACGCCCGGCTAA
 CTTTTTGTGTTTTTAGTAGAGACAGGTTTCACTGTGTTAGCCAGGATGGTCTTGAACCTCTGACCTCAGGTGATCCAC
 CCACCTTGGCCTCCCAAATGCTGGGATTACAGGCATGAGCCACCACACCTGGCCGAGAGTTTGATTTTATAGCATTAG
 GGTTTTAAAGCTAGGTTTTTAAAGGTAGGTCACTGGCCAGTTTTTTATTTCAATATATAGTAGGTAACATACAGGTCTAA
 AATGATCTAACAATTCCTTAAAGTAAGGCTTTGAAGTTTGCATTTATAAAAGAGACTTAAATAGCTCTTTTGCTCTTT
 AGTGTGATATGACAAAAGATGATGTGTGGCATTTGGAGCCTGAATGTGAACCCAGTCTCTCCTTTTTGCTTCATTTCTCT
 ATTTTGGAGATTTGAGTACCTAACACTTAGGACTGTTGCAAGAATTCAGGAGATAAGTTATATAAAAGGATAGAGTTC
 AAGTTGGGCATGGTGGCACACCCCTATAATCCCGGATATTTCAGGAGACCAAGGTGGGAGGACTGCTTGAGATCAGGAAT
 TCAAGACCAGCCTGGGCAATGTAATGAGACCTGTCTCATAAAGTAAAAAAAAAAAAAAAAAAAAAAAAATGGAGCCGGG
 CATGGTGGCTCATGCTGTAATCCCGACATTTTGGAGGCCAAGGCGGGTGGATCACCAGGTGAGGAGTTCAAGACCAG
 CCTGGCCAGAGTGGTGAACCCCGTCTCTATTAAGATACAAAAATTAGCCAGGCGTGGTGGCAGGTGCTGTAATCCCA
 GCTACTCGGGAGGCTGAGACAGGAAATCGCTTGAACCTGAGGGCGGAGGTTGCAGTGAGCCGAGATCAGGCCACTGCT
 CTTCCGGCTGGGTGACAGAGTGAGACACCGTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAGAAAGAAAAATGGATAG
 AGTTCCGAATGTGATGAGGAACTCACCAAGTGTCTTCTCTATAACCTGTCCCAATGCCTGACATTTTTTTTTGTTCTTA

Fig. 6.30 ~~2~~

313/375

AAGCTAATTTAAAACTGGTAGAATAGAGGTAACAGAGAATATTGGTATGTCAGCTTCTTTGGTACATTTTCATTTATGA
 TTTTGTTCACACAGTCATGGCATGACATTTTGTAGTAATCCTTTTATCATTTAGAGTAAGGCTCACCTACATACGTCC
 TTAATGTGTGGTGACACCAGAAGTAAAGAGTGCATTGGAACATGAGAGGGTGGCAAAGAGTCAGAGATGCCAAGCCA
 TACCTGCACTGGGACAGTGATCCCATTTTGAAGTACAGCCATGTAGCTTGGAGCACAGTCCTTCCTTGTAAGCATTTTC
 ATTTTCGAACAACCTTAGCTCAAGGCAAGCATTTCTGCAGCCATCTCAITAAATGTTACATCTTCACAATACCATTTTCA
 ATGCTTCTGAATTTCCATATTTCCAATATGTTTATTTAATCATCTCAATTAGAGGATTTTCATGCAAGGACACAACCTC
 TAAAGAAAACGTATTTAAATATCTTTATTTTAAAGATGAAAAAACTGAGACCTAGTGAGAGAGGGTGCTGCTTAGTGAC
 AATGCCAGGAATAAACATGTGGTTCCTTTTTCGAGTCCATGGTCTTCTTACACCTTTATAAAAGTAAATAAACCATTA
 GATTCCGGGTGGCCTTTATACCCACCGTGAAGTATATGCTTTAGAGAAAAGTAAATGAAGTATTAATACTAACCTCTGAG
 TAATAGATGTGGCATTGTATTATTTGTATATGAGCTTGAAAAATTTCTCATCCCAACCTCTCACTGGACATATCTCTGTA
 GTTATAGCTATTTTGATTATATCTACTGCTTATACCCAGAGGCATAGAGACCAGCACCCCTAAAGCAAAAGACTTCTGG
 ATTTTGACTTTGGAAAATACAAATTCCTTCTACAGGAGCGGTGAACTAGTACAGCTGCCCTGCTCTTTACCTGTAGGGGG
 AGACACATGATGCAGTGACAAGCATAGAACAGCACAGAAAGTGGTTTTAGTCCAGAAAATAAATAAATAAGTAAATTTGGT
 CTAAGTCTTCATTCCTTTTGTATTTTACCCTGAAGATTCATGGCTTCATTAAAAACAGTAAGTGCAATCTAAATA
 GAATTTAGTCAATTGGCACGTAGAAAATTAAGTAACTATCCAAATAATGCTAGTCTGTCAAAACACAATGAGAAG
 AAATTTAATCTTATATGTTTGTGTTCTAAAGCACAAGCAGTTCTAAGAAATTAATAAGGGGGAAAAACAATAATGATA
 TTTAATTGGGACAATTATTTTGTATCTGGGCTAATCACTTAATGCTTTGAGCTTATCGAATGAAAGAACTAAGC
 AACTATTTTCATGGTGACAATAAGGATGCTGGCTACTTACTTAGATCTGCCCTTTTAAATCTGTGTGTGTGTGATAAAAGC
 AAGTAGTATATATAGTTTAAAAAGAAATATAGAGAGATCTAATAGATGGGAGCAAGAACCATATAAAGAAGGCCAAA
 AGGGATCTACATGAGAGAAAATATGTAAGTCTCAGGAGATACTGAAGTAAACATGTGTTGTGTCTAGTGTATAGGGAAG
 ACAAGAGACCCAGCCATTGCCAGAGAAGCCCTACTTCTCATCAACCACCAGCAGGCAGCAGCTTCATGCTGTAGTTCT
 TTTTTCCTTTAATAGAAATAAGATTGTGGCCACACTTTAATAATTGCCAGAAAATATGTGTTTCAATTAAGCTTTTAAAGA
 AATGTGATCGAAAAATGCTGATGATACATTGTGTTAATAGCTTTAATAAAAACTGATAAAGCATCTAATACATCTAA
 TGACTGTCCGATTTCTAAATCTTTAAGCTGAAGGAGTTTACTTTTACAAAAATCCTCATTGAAAAAGAATCTTCCGG
 TAAAAACATTGAAGTGAAGATTGTCATAAATGCATGAGATTAATTTATTTAGTTAACTTATGATCTTTTAGAGC
 AGTAAAGTCAGTTCTTCTTCTTCAAAATGAATTTGTTTGGCCTTTTATGCTTTTATTTAATGAGTAGAGCCATACCT
 ATTAATATATAAAAAAGATCAGATCTGACACCGTGGCTTTTGGACAGGAATGATTGAAGTTAGACTTGTGTTTAAAGAA
 AGTGAACAAGGGCTATGTCTTAATTATGAGGGGAAATAAATTTAATTGTGTCTCTCTGTCTGAATATCTGATTTGGA
 TGCTTTGTTATAACTTTAATTGAAAATAAATAAGGGCTCATGTTTCAATTTAGCTTAGCAAAAAGGTGATGAGCTAGCA
 TATATGTTAAAAACCCAGCTTTCTCTTAGTAGTTGTCTAATTTTGGTCAATGTACTTAAATCTCCAAGTTTGGGGG
 TATTCTTTATCAGTAAATCTAATTCAGTGCTTAACATAGTACTTGGTACTCAGAATGTATTCAACAAATGTTACTTAT
 CATTATTGCTATAATATTATTATTATTATCTGCTTGGTCAACAGTATTTTCCATGCACCTTATATATGGCATGCAT
 ACGCTCTGGAGGTAAATGTGACTACTGGTTCAAGAAATTTACAAAGTAAGGGAGAAGGAATTATAAATAGTTAAGTAC
 TAGCTAAATGCCATGATTGAAGCCTTTATATTTTATTTAATTAATTAATTAATTTTATAGAAATAGGGCCTCACTCT
 GTTGGCCAGGCTGGAGTGAAGTGGTACGATCTTGTCTCATTGCAACCTCCGCCTCCAGTCTCCAGCAATCCTCCCACC
 TCAGCCTCCTGAGTAGCTGGGACTACAGGCATGCACCACCACGTGTGCATAATTTTTTATTTTATTTTGTATTTTTT
 GTAGAGGCGGCTTTTGCCGTGTTGCCAGGCTGATCTGGAACCTCCTAGGCTCAAGCAATCTGCCACCTTGCCCTCCC
 AAAGTGCTGGGATTATAGGCATGAGCCACAGAGCCTGGACTGAAACCTCTTTAAATATATATATTTATATAAATATATA
 TTATATATATATATACAAAATATATAATATATAATATATTATATATATTATATATATTTTATAAAATATATATATTCTTAT
 ATAAATATATATTTCTTATAAATGTATAAATATATATTTATATATATATTATATACATTTATTATATATTTATTATA
 TATTATATACATATTTATTATATATGATTATATATATATATATATATATAAATATATATAATATTATATATTTA
 TTATATAAATATATAATATAAATAAATATCTCATATAAATAAATAAATAACTATTTATTATATAATATGTTATTTCTCATAT
 ATATGCTTATTATATAAATAAATATATTTCTCATATAAATATATATGTTTATTATATAAATAAATAAATAAATAAAT
 AAATAATTATATATATATTTAATATATAATATATATATGAATATGTATTTCATATATAGAGAGAGAGAGAGCCAGTGGCTC
 TACCTAGGAAATGCTCCCTGATAAATTTGAAGAACATAATGCTTTCCATGTGGTTAGGGGAGGATTGAGGATTACCTCA
 CAACAAAAGACCAGCAAGAATAAGGTATGGAAGCATGGAATGCCTGTCCATATCAGGGGACTGGGAACAGTAAAGGACA
 AATTGAGTTAAAGGTGTATAGGAGCAACTGAACAGGATGCTCCAGAGGTAGATTAAAGGAAATAATTTGAGGCCCTACA
 TAAATAACAGTGGACTTTATTTTATGGACAGTGGAAAATCATTGAGCATTTCCAATCGTAGGAACAAATACACATTTCA
 GAATGACAGTAATTGGAAGCAGTGTAGAAAGAGATTGAAAAGAAGAAAGACTAGGGGCAGCCCCATACTCTTCAGGGGG
 CTGTCACAGGCCTTGTACAGGATCAAGATAATGCAGCTCTGAACTGGGGTGGAAAGTGGGGCTGTGGAGATGAGGGAATG
 GGTTCACAACCTCTTCAGAGATAGGATTGAAGGGACTTGGGGGTGATTAGAGCAGAGACTGAGGATGAACAAATTTTAA
 GTGAAAGTATGAGCCAGGTGTGGTGGCTCACGCCTGTAATCCCAGCAGTTTGGGAGGCTGAGGCGGGTGGATCACCTGA
 GGTCAGGAGTTCAAGACCAGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAAAATACAAAAATTAGCCAGGCGTGG
 TGGCAGTGCTTGTAAATCCAGCTACTCTGGAGGCTGAGGCAGGAGAAATGCTTGAACCCAGGAGGCAGAGGTTACAGT
 GAGCCGAGATGGCACCATTGCACTCTAGCCTGGGCAACAAGAGAGAACTTCATCTCAAAAAAAAAAAAAAAAAAGTGAA
 AGTATATATACACATGTTTATTACAGCACTGTGAATGTGCATAAAGGGTTAAAAACAATCCAAATTTCAAATAATGTGT
 GAATTCATTTAGGTAGGGGTTAAAAAATTTCCATAATAAATGATTTTAAATAATTTATTTTGGAGAAAATTTTAAATA
 ATATGGAATAATGTTTGTATTTTAAAGGAATACATAATAAAGTGCCATGTGGGCAATAGGCACACATTTAATGCACTTTA
 ATTATGTATATTGAATTGAACCTTAAGTTACTTTTAGTTGTTGACCAGTAGTTAGCAAAGGTAGATAGGTTTACCATTTT
 ACATTGAATCTAGTGACAAACATGTTATTTCTCAGGTCCCAGTTGTTAGTTTGCCTCTCCTTGCCCTAGAAAGGGCACTG

[illegible]

Fig. 6.30⁴⁷

315/375

AGATTTTGTGGGTTTCATATTCTAGCACTACGACTTACAGATGCTTGTGCTCAAACAATTCAATTTAACCTTCCAGAGCCT
 GAAATTCCTCACTTTTGAAGTAAGCACATAATAATATTTATCTCATAGGGAGTTTCATGAAAATTATTTGAGGAGATAT
 TTATGAAAGGCTGGGCATGGTTTGTCTACGCCCTGTAATTCAGCATTTKGGGAGGCTGAGGCGGGCAGATCACCTGAGG
 TCAGGAGTTTGAGACCAGCCTGGCCAAATGGTGAAACCTGTCTCTACTAAAAACACAAAAAATTAGCCAGACATGG
 TGTTCACACCTGTAATCCAGCTCCTTGGGAGGCTGAGGTAGGAGAATCACTTGAACCTGGGAGGCAGAGGTTGCAGT
 AAGCTGAGATCGTGCCACTGCACTCCAGCCTGGATAACAGAGGAAGACTCTGTCTTAGGAAAAAAGATATTTATGA
 AAAATGAAGCAAAATGCATGGCTCACAGTAAGCACTTGATCATTTGCTGGTTAACTATTATTAAGATTATCTAATAGGGA
 TACAAAGTATATTCTGAAAGAAATTAGGGTGTCTTTAGATAGGGGAAATAAATGCTAGTAGGATTGGTTTCAATGCAC
 TATTTATTTTATTAATTTATTTCTCACTGAATTTCTTTTATGATACTCATTTTATTTTATAGAGATCCAGATGGTACCTGT
 CATTAATGTATCCCTGAGAACTCAGTTCCCTCTGAAGGCACAAAAATAATTTGACCATCTCATCATTTGATCCACACACA
 TTTATTGATGCCTCTTTATGCTTTGGTTCTTATACAAAGACGCCGTGACGTGTGGCCCCCTGTAGGAAGTCTTGGCCTCTGT
 CTCTAAATCTGTTCATCTCAGCCCCAACCCCTATTTCAGATTATCTGTGCCCTCTGCGTAGCCATTCACTTCGCCCTGGGTGC
 AATCATGCCCTTCTTACCCCAACGTTTAAACAAGTCCAGCCTAGCAACCTACATCATGCCATCCAACAGAAGGAAGGCATT
 ATTGACTCAGAAACAAAGTATAGGCGCTCTTAGAATAAGTTTATTAATCATTTTAAAAAAGATATGTGCTTTT
 CCCAGGGGAGCAGTGAGGCATTGTCTAGAGGGTGGATTCAATTAATCAATACAGAGAATCCTGGCTGCACATTTTGTAG
 CTATTTGACTTTGGGAAAGTTATTTCTCTGAGCCTTGATTTCTCATTAGAAGACGGGAATAATAGCAAACCTATCTCAGA
 GCATTAAGTAAGAATTAAATGAAGTGAATTAAGCACGAAACCTAGCATCTGACGCATAGTAGGAACAAAAAAGAAATA
 CTAGTTCTTGAATAAACATTTTCTTCTGACTGTACTGTGATACTTCCATCAGTGAGTTTCCAAGGCAATGAATCATC
 TTTAGAATTGGAAGCTCAATGTAAGCAACAATGAAGTAAAGAAAAACAACCTGAATTTCTCTTGAATTTATTTTCCTTTAC
 TGACTTGTCTTTATTTGTCTGTGTTTCAAGAACTAGCTCTGACTGCAAAAATGTCTGCCCTGTTTCTATGGCCAGTTCT
 TTTCTACATGTTTAAATTCCTAATTTGTGCACACAATCTTAGTCACAATATTTTCATGTGCAAGCAATTAAGACTCATTT
 AACAGCCCTCCCTCTGGAAGGTTTGTCTCCATCTGCCACAAATCAGATTCCCTTAGGAAGATATTTGATTTTGAACA
 ATGTTAAAGTACTGTTTCATTTTGTTCAAATTTTCATTTATGTACCATTTTAAAGTGATGTAAATGGACAGCCACAAA
 AGCTCAGCAGCTGGTCAAAACAAACATCAAAGTCACCATTTGAAATGGGGCAAAAAATTAACAACTAATATGCTGGGA
 CAATGCCAAATAAAAAACGATAGTCTGATAAACATTCCTCAGACACATTTTGTCTATAACAACATTTTCTTTTACAGCAG
 ATTTAAAAATATGGGAAAATAGGAATATACCCAGTTGCCACTCTGAATCTTAGCTGTCTGAGTTCACTGCAATGATATA
 TAATAAGGAAGTCAGAAGGTGGAAAAGAGGAAAGATTAATTTTGAAGTTTGTGAAAGATATATGTTGTAAGTATA
 GGTATCCAACAGATTTGTACGATAGATTGTTTCTTAAAGTACAGGACGGGTGGCTCACGCCTGTTATCCAGCATTTTG
 GGAGGCCAAGGAGGGCGGATCACCTGAGGTGAGGTTCAGAGTTCAGACACAGCCTGGCCAAACATGGAGAAACCCCGTCTCTAT
 TAAAAATACAAAATTAGCCAGGCGTGGTGGCACATGCCGTGTAATCCCGGTACTCGGGAGACTGAGGCAGGAGAAATCGC
 TTGAACCTGGGAGGCAGAGGTTGTGGTGAGCTGAGATCGCGCCATTGCACTTCAGCCTAGGCAGGCAAAAGTGAACCTGTCT
 CAAAAAAGGATTTGTTTCATTTAAAAATCAATTCGATTGGCCAGGCACGGTGGCTCACACCTGTAATCCCA
 CAGCACTTTGGGTGGCCGAGGCAGGCGGATCGATTGAGGCCAGGAGTTCAAGATCAGCCTGGGCAACATGGTGAAACCC
 CCGTCTCTACTGAAAAAAGTAGCCAGGCATGGAGGCATGGTGGCACATGCCCTGTAATCCAGCTACTTG
 GGAAGCTGAGGCACGAAATGGCTTGAACCCGGGAGGCAGAGGTGAGATCATGCCACTGTACTCCAACCTGGGTGACAG
 AGCAAGACTCTGCCTCGAAGAAAAAATCAATTAGATAAGTGAGAGTGTATATTCAGGGCAACTTAAATCTATG
 CTCTCAGATTAAAAATAAGATTTAATTACAATTTTTTTTTTTTTTTGATGCAGGGTCTCACTTTTTTGCTCAGGCTAGATT
 GCGGTGGCACAATCACAGCTCACTGCAGCCTCGACCTCCTGGGCTCAAGCAATCCTCCACCTCATCCTCCTGTCTACC
 TGGGACTACAGGCACATAGCACTGCACCACCATAACCTGGCTAATTTTTTAAATTTTTTTTTTTTTTTTAGAGACAGGATC
 TCACGATGTTGCCAGGCTAGTCTTGCACCTCCTGGGCTCAAGTGATTCTCCTGCCCTGGCCTCCCAAGTGCTGGGATT
 ACAGGTGTGGGCCATCACACCCAGCCAATTTTGAAGTATTTAATTTTAAAAATGAAAAATTGATTAGATAATAGTTCTC
 CCTCACTACAGGTGAAGTCTGTTTTTATTTATTTGTTCAATGGGCTTCTTTAGAACATGACATAGAAGGCAATCCTTGG
 TCAAAATTAAGGCAGAAACAAGAAATTTATAGGTTCTGAAACATAAATACCTGTCTGTGAACCTGGTAACTCTCTAATTAAG
 CATAAATGTGAAAAGAAGAGGATTAGCTCTTCTTGAGGAGTTGGAATAAGGAAATATTACAATTTGGAGAGGTAGCTTG
 CAGAAACCGTACAGTTTCTCTGCTTATATGCCCCAGCGTTGGGAGACTTGAAAGGAATCACCAACCAAGTTAATGCAA
 TAAATTTCCATATATAGATCAATTTGGATGTTTTGTCCCCAGCTTCTTAGGCCCTTTAATAAACTGAATTTGTTTTGGTATC
 ACTGGATGAAAAGTTCTGTAAAAGTTCAAAGTATTTGTTATTTGGGGCATTTCACACCTGCATGTTTAAAAATGCCTTTGTG
 CAGAAATGATGCCAATCTGCTTTCAAATCAGACCTTCAAAGAAGGGTAGATTTCATCCATGTGACAGATCCCCCTTAGGTG
 CTTCTCTAAAAAGAAAAGTTAAGCTAGCAGGCTTACCCCCACTCATATCTTTGTCTCTTTGTGCGTAATCATCAAACC
 GCACCTCTGAAAAGAAAGACCAAGAGAAAACCTTAGTATCTCTTTGCTGGAGATGCAAAGCAAGATATAGAAGGAACTGG
 AAAATAGTTCTTAAGTAAATACAGGGGAAAACGGAAATGAGAGGACGTACTTTTCGCTAACAGTTGTAACTAAAAA
 TAAAAATTTGAAGCACGCCTGCACCCTCACCTGAATGGACTTCTCCTTGGCCAGGGCACTTTAAAAATTTAACCTGAAAG
 ACTGATTTAGGCCGCAAGGAAGTCAGACATGCCCTTATTTTACCCCTCCAGTATTAACATCACCACAGACCTTAAGTCT
 GATAAGAAACATTTAGGATCTCTTTTCTTGGAAAGCCTGCTACCTGGAGGCTTCATCTGCCCTAATAAACCTTTGGTCTCC
 ACAACTTTTATCTTAACCCAGACATTCCTTTCTACTGATAATACTCTTTCAACCAATTGCTAATCAGAATATGTTGAA
 ATCTACCTGTGACCTCGAAGCCCTCCCCCAACTTTGAGTTTTCGCCCTTTCCAGCTTTCCAGATAGAACCAGTGTAAT
 CTTACATGTATTGATTGATGTATTATTTCTTCTTAAATGTACAAAAACAAGCTGTAGCCTGACCACCTTGGGCACATG
 TCTTCAGGACCACCTGAGGCAGTGTACACGTGCATCCTTAACCTTTGGCAAAATACACTTTCTAAACTGATTGAGACCT
 GTCTCAGATATTTGGGCTAACACAATGAATATGAAAAACCTTTTGTGTCGGGGGTGGGAGGTGGGACGGAGTCTC
 TCTCTGTTGCCAGGCTGGAGTGCAATGGCGCAATTCGGCTCACTGCAACCTCCACCTCCTGGATTCAAGTGATTCTCC

316/375

TGCCTCAGCCTCCTGAGTAGCTGGGATTACAGGCACACGTACCATGCCTGGCTAATTTTTGCATTTTTAGTAGAGACA
 GGGTTTCACCATGTTGGTCAGGCTGGTCTTGAACCTCCTGACCTCATGATCCACCCATCTCGGCCTCCCAAAGTGCTGGG
 ATTACAGGGCGTGAGCCACCACACCCGGCCAAAAACAACATTTTTTAAAGAGCATCTAAGCTCAGAAATCACAGGCATA
 TTACGCCTGCCACTAAGGGAGTTAGTTCCATTGAAGGATATAATTAAGAGTGAATGAATGGTGTGCTAAGCACTTAGG
 GATAGTGGTTACAAATTTGTCTGTTCCTTAAATCACCTTGGGGGGCAGGCGTGGTGCCTCACACCTGTAATCCCAGC
 ACTTTAGCAGGTCAAGGCCAGAGGATCAGTTGAGGCCAAGAGTTCAGACTAGCCTGGGCAGCGCAGTGAGATCCTGTT
 TCTACAGAAGATAATAATAATCACCTGGAAATTTCTTTTTTAAATGCAGCTAATGAAGGAAAAAAATCCGAGGTTT
 TGAAACCAACTCAAAGACAACAGCGATATTCAAGCATAAGATGTAATAAAGGTTGTACACTAGATAGCTAGATAGCCAG
 AATAAAAAGGAAGAGATAGTTACAAAAAATATAAGGAGGATAAATGTATAGGATTTTCATAACTGCTAATCATATGATTT
 TACTGAGTAGGTGTAAATGCTTCTGATAATGTGTGAAATTTATAATCCTTCGTATTATATGTAGGATAAAACATAGGT
 TAAGACCTGGATTCTAAGGCTGAATTTAAGGCTAGTTTATCTCCATCCTTAGATTTCTTACATTTTCAATTTAAGAGAAAA
 TGTCTGTATATTGAATATTCATGAAATCTCTGAAAGGTGTTATGCTTATTCTTAACCTCTTAAAGGTGTACACTGAA
 TGTAATTAAATCATTTTTGCTGGCTCTGGTTCTCATGAACATCTGCTTTTGTACTTCCCTGTCAATTCACAAATGCACT
 TAGGAGCTAATGATCTATGAGGACTTTTTTTTCCCTACAGTAACGAGCAGCAAATCTGGCTGCATTTAATTTCTCAT
 CTGCTGTCCCATATTGTCTGGTGGTCAGTTTCTGATGTTACTAAGCTTGGCTTTATTGGCATCTTTTGTGAGCTGCTGC
 TGCTTTTTCTTGGCAAACCTGATTACCAAGCTATTGCATTGAGCATAAAATAAAGGTAAATTAATTCAAAATAAAAGT
 GAAGGTTGAGGGCAATTCATTTCTGAGGTAGACCTTTAGGATATGAGATGCATAAAGTGAACAAGATCCTACAAGTGTT
 TACTTGACTTTTCTGGGTTCTTTTTTACCCTACTTACTGATTTTGAATAGTATAAATTCCTGGATAATTAATCTGGATAAG
 TAAGTCGTCACTGTACCTCTAGAGAAAAATAAATCAACCAAAATATGTTTAATTCCTGTGCTCTGGGTTTCAAGAAAAACA
 AAAATGAATAAGATATAGTCCCTACCCCAAGGACTTGACACAATATAATTGTACATGTGCAAAAGAACTGTCTAGGTG
 TGGTGGCTCACACCTCTAATCGCAGCACCTTTGGGAGGCTGAGGCAGGAGGATCAGTTGAGCCTAGGAATTTTACAGCCAG
 CCTGGGCAACATGATGAAACCTTTTCTCTACAAAAAATAACAAAAATTAGCCAGGCATGGTGGCACATGCCTGTAG
 TCCTAGCTACTGGGGGAGTTGAGATAGGAGGGTGTCTTGAGCCCAAGAGGTCTAGGCTGCAATGAGCTATGATCACAGC
 ACTCCAGCCTGGGCAAAAAATCTTAAGTAGTCTCAGGACTGTACCACAGAGTATCGTAAGAATTCAGAGGAGGCAAGA
 CCAAAATTAGAAATAAAGCACATGAAGGCTTCCAGCAGAACATGGTATTTTGTGGGCTTGAACACTCTTTAGATGC
 TTTAGTTTAATGTGCCATAGTACACTTTCTGTATTGGGAGTGTTAATGGGTGATAACTACTCCAGAGCTTTAGGATTG
 CTTCCAGTATCCCAGCAAAGCAGCCCTTTTCAACTAGAACCCTTTGCTATTACAAAAGAGAGGTGATCACTTGTGATTT
 CTTAACATTTCTTCACTTTTGCCCTCTGGCACTGGGCTTCTGAAAGTCCAGGAAAGAGCAATGACCTCAGGGTTTTAAGAC
 CAGGGGTATAATCCCAGCTCTGCCTAGCTCTCTGTGTAATTTTTGGTCAAGTAACTTAACTGGGTTGTGTTCTGTAAAA
 TGATGATATTGGATTAAATAGTACCTAATCATCTAATTTTTCTTAATTTTTATTATTATAAAAAAATGCATGCCTCT
 GATGAATTGCCCTTTATCTTTTAGTTCATATTTCCCTAAGAAGTGAATAAAGATACCAAGGCAATGTGTGAATTCAC
 TTTTTCCAATCTGGATGTTTAGGGGATATCCTTGACACCATTGCTATTTTGTAGTTTTCAACAAAGAGTTAAAGAAAA
 TTCTGGCACTCCTATCTAGTCATCTCTCCAGTTGGCAGAAGTCTTCATGTGGACTTGATGGTTGCCCAGAGCAACAAA
 ATATTAGGGACAGAAACATGTTTCAAGGACTCGATTGTATAAGTGACTCAGAGCTGAGAGACCTTTTCCAGCTTGACTGC
 AGCCCATACTTAGCTAAAGTGGGTATTTGTCTATTCCCTGTCTGCATACTGTGACTTGGAGATGCCCTATTATTTTGTCTG
 CTAATAATATGGAAGCCAACCTTGAAACTGGCAGAGAAGAGTTAAATGATCAGAAGGCAATCGTCTTCATTACAGCACGTC
 TGACACATGAAAGATCATTAGGACTAGCAAAATATAACAAGATCAGGGAGTGGTCTTGGGCTTTGAAGAGCACATACCA
 AGAACATCAAGAGAACTCAATATAAATTTCAATATAAAGCTACTATTCAAGGCCAATTATCTCTTTTGAGTTAGAAGAG
 CCCAATGGAGAGCCACTCACGCAAAATCAATACCCCTTTCTCTCTCAGTTGGAGCCAGACATCTCTAATATCCTCTGA
 ATTAACTGGATTTTTTTAAATGTTTTTCTGTCCCTAACTCTTTAAATCCTGAGGTCATCCTTTCTTTGTTCCATCAGT
 CTGGCTCCATGATACCAATTACTCCAGCTTGTAAAGCAGTTATTGGCATATGGTAGTCATGTCTTTTGTCTTATGCA
 ATGTTTCTGGAGCAAGAAATGGAGGGAGAAGATTAGCCAAGTCTTTGTGCTTTAAGTCTCCTCTCTTCAACTGTTTA
 ACTAGGTTCCATCCTAATTAATGTGTTTTGGTTAGTTTATTGATACCCCAATATACATTTCTTCATTTGTACATRAAC
 AATGTCAATTATGGTAATAATAACAATTATACAATATTACTTTCTGTCTCATTGAATGTCAATTATGATCAGGAGCTGGT
 CCTCTTGGTTTGGACATTAATWATTTGAAATGAATATTCTTTTAAATGATTGGAAACTTAGTCGTAAATTCAGTGGTT
 TACAATAGTAACTCTTATCCCAGTAACCACAGCACCTGTTTAGAAAAATGTCTTCGGATCACTTGTTTGCAAATGTCTT
 TTTCTTAGGATCCTGGATGGAATTGAACCCATATACGTTACTTGACATGTGAAACACGTGTGACCCCTGGCAGATGATT
 TGGCTGACCTTGAAACTACAGCTGTTTAGTCACTTTGAAACAATGCAATACAAGTGATTTACTAGGCTTCAGTTTAA
 ACCATTTTATGCTGACTGGTGGAAATTTCAACCCCTCAGAAAGAAAAAATTTGTGAAGCAATGGAAATGTACCATCC
 TGGGTATTAATGTCAATTAATTTCAATACATTTTCTCACAAAAGTATAAAGAAGTCTTTGCTTGACCTTACGGGAAAA
 AACACATACATGTGGCTTTATTTTGGCTTTTTTTTTTTTTTAAATTAATGAAGAAATCCAAGATTTGACTTTTGTCTT
 CTCTACCCAAATCAAAGCAGTCTATAATCTCCTGCAAAGATCAAAGCTTTTTGCTTACTATAAAGTATGTGCCCTGCT
 TAGGCATTACATGGTAGAAAGATAGCATTCTGTTCCAAGAAATCTCTATTCTGTTCTCTAGTTGCTGTGTATATATTCTC
 TTTTAGCTAGAATATGGTTAGTAAATGAGTCCGAAATTTCTGCTGTATATACCAAAACATGTTGTATACCATAAATAT
 ATAAATATTTTTATTTCAATTTTTTAAATTTGTGCTTCAATCAAGACAGAAGTTGATTTCTTTTTCCAGAAATTCAGA
 GTGAGCAGTCCAGGGCTGTGTGGCTGCTCTAAATCACCAAGGGCCAGAGCTTCTTTAGATAATTTTTTTTTTAAACA
 TTTACTAGATTATAGGGCTTTTGTCTTCATGGCTGTGAGTACTACAAGAGCCCTAGCCATCACAACTAAGTGGCCAG
 CAGCAAGAAGGAGGAAAAAAGAAGGAATAGTACACCCACTCCTTTTAGAAAAGGCTTCTGAGAAATCCACATAATGCT
 TCTACTTACATCTCCTTGGCTCAAATTTAGTGTCTGCCACAAAAGAGAATAAGACACACACACACACACACACAC
 ACACACACACACACACATATATATATATTTTTTWTTTTTTCTGGCAAGTCTCTAGTTTCAGGGATTTCAATCTCCTTTA

317/375

AGCAAATGAGTCTTCTCGCTAACCTCTCCCTCTGGCCTGCCAGTCTCTCTCGAATCTCATTGCCATCCTGTCCCTCCTT
 ACTCACTTTGGGAAATCCAGCTCTGTCACTTTTACAGTCTGCCTTTTCCACTTCCCTTACCTGAAATCCCTGGGAAAAAT
 AATCCACATCACTTCAAGCTGGAATCCAACAAAGTCAAGACCTGTACCTCATCGGACTCTCAGAGCACTTGTACAGT
 TAGTTCCTGTGTGCCCCCTCTCTCAGTCCCTCTTCATGCTAATTCAAACCTGTCTCTCTCTTAAAGCCTCCCAAACCAG
 CAGCTCTTCATCTCCTTTTCAGCAAATAACTTGTGTCTTTTGAAGAAAGTCTGTGTCAAGGCATGAACCTTCCCTCAGCTC
 CTACATCCTCTTGCATAGATGTTATCCATAGGTCTCTTACTGACATCCATAATCCCTTCCCTCCTCTCTCTCCAGCTCCCA
 GATGACGTTTTCCCTTCTCCCTCCTGTCTAAGTCAACCCCTGCATCTGGGCCCTTGATCCTCTCTCTCTCCAGCTCCCA
 CAAGTCTTTGCTTCGTCTGTTTTCTTTCTATCTCTCACATCTTCAATCTTTACTTTTATTCGGCTCTTTCCCATTC
 ATGTCTCTCACAATCTTAAAAACAATACACAGCAAAACCACAGCAAAAGTTCAGCCAACTCTTTATTTGATCCTTTAGCTAG
 TTCTTGATCTTCTCTTTTCAGTCAAGTTGCTCTACCTCCTCATCCCTATTTCAGTCTGCAGTCCACTGTAGTACGACTTT
 CTCACAACACCTCTGTTCCAGCTGCCCTCCCTTGGTTGCCAATGAACTCCTAATTGCTCTCTTAGTTCTTAGAGGCTTC
 TTCTTCTAAACTCTTTCTTTGTTCACTTACTGAGTAAATATTTATTCACATGTTTTTGTGTGGGAGCCATTTTGTTC
 AGATGTTTTCCACTCTTCTTGTCTCTGAATACTCTTTTCACTATTCTTCATGGTCTCTCTTCCCTCCCACTTTTAC
 CTCTTAAATGTGAGTATTCTAGAATGTTCTTTTGTATTAATTTGGTTTTCTCACTCTGTGTACTCTGTAGATGTTTTCAT
 GTACCTCATAGTTGATTTTCCATCTTATGAAAGTGGTCCCAAACTCTGTCTCTACTCAGAGTAGGCACCTTCCCAAA
 TTTCCAAATTTATTCACACAAAAGCCCAATGTCTTATGATATCCAACTCTTCAAATCCAATATGTCCAGAGCTGGACTC
 ACATATTTCTTTGCAAATCTGTTCTTCCCTATCTCAGTTAGTGAAACACTTTTAGCCAAGATCGAACTTATAAATCATG
 AATCCTTCTACCAAACTATCTGTCTGTCTATATATATTTTGAACAGAGTTGTCTCACTCTGTTGGCCAGGATGGAG
 TGCAGTGGCAAGATTTAAGCTCACTGTAACTCCACCTCCTGGGTTCAAGCAATTCCTGTGCTCAGCTCCCAAGTAG
 CTGGTATTACAGGTGTACACCATCACACCCAGCTAATTTTGTATTTTGTAGTAGAGACAGCGTTTCACTATGTTGGCCA
 GGCTGGTCTCGAATCTTGGCCTCAAGTGATCCTCCTGCCCTTGGCCTCCAAAGTGTGAGGTACAGGTGTGAGCCACC
 ATGCTCGGCCCAAATGAATACAATTTTATTTTATTTTATAACTATTGATCAAATCCATGCTCTCTCTCTAACCTGC
 TAATATTTCCCTAGTTCAAGCACTCACCACCTCTCCCTGAATTTATAGTACTAGTACCTGAAATAGTGTTTTTGAAACT
 GTCAGTTGCATTTAGCATTTTATTTTAAAAATATGATACAGAAATGCGTAAAAAATAAGAGTATAAAACCACATCTATA
 ATATCAAAGATAAATATGGTTTTTATAAAATTTATTTGATACACCCACAGACATGCAAACACACAGACATTTTGGCATGA
 AAATGTATTTCTTACTATAATTTTAAAAATTTAGAGAACTACTTTCTTAAATGGTTCGATCTCTGTTGCACCTCTTCTTAG
 CTCTGGCCTTCCATGATGCCAGCAAATTTATGTAGTTGAAAAATTAATCTGCAAATGTCACTCTTCTTAAACCTTTTC
 AAGCCTTCCCATCATCCATGATAAAATCAGATCTCTTTCGTGTGGTACCCAAAGCCCTATCCAGATATGTATTGTACC
 TCCTCTCCAGCCCAGCCCCCTGGCTGACTCTTTCAGCAGCAAACCTTTTCCACCCACGTGCACCATGTTTCAACATGTC
 TTCACTTACTTGTACTCTTCTCACCATCTAAAACTCGCTTCTCTCTCATAATTGCCCTGGTTCACTTTATCTATTTAG
 AGGACACCTAAAATTCAGGCCAGTCCCCCTTCCCTCAGGCCGAGTCAAGCTCTTCTCCCAAACTACCTCTAGCATAAAC
 TAATGAAATGTCTTAAAAATTTATGGTCTATGCCCTCTTTATTTAAAAAACAACAACAACAAAAAACCCTGCC
 CACAGTATAGCAATTTCTTTTGTATATAACACACATAGTACTAGTGTGTGGTCTTGGGGCACTGTCTGCCAATTTACC
 TGTGTTCAATAGACCTGAAGTAGGGAAGATCAGCTGACTCTTTTACATCTCTTCTCAGAACATCTTGAATGATTTCTG
 GGTGCAATATAAGAGCAAACATGGAACAGTAGAAACCAGCATGGAACAACTTTTCTCTCTATTGAGAAAGTGGGATGA
 AAATGTGTCTCTTAATCCCTTTGGCAGAAGGGAGTAACCTGAAAGAAGTGGATGATGGATGATCTTCTCCACTCTGTCA
 GCCCTCTGAGCAGAATGAGGAAAATGTGAGAAGCGATACCATGCTATATTTGTTTTCATTGACCATTATTTTAAATAAC
 TTACATGGTCTCTGAACAAGGACATGTTTTTGTGAAAAGGACAACATTTCTTTTGGTGTGTCCGAGTAGCATTTAAGAAA
 AGCCTTATAGTGGTCAATGAAGGTGGCCCTTTCACCCGCTGCTACTGGAGAGTCTGTGAGAACATTTTATTTCAGCCT
 CATGGAACACTAGGGAGTCATGCCCTGGGATCTGACAACCTGTGCAGCACCATGCCAGGTGCACAGAGAGTTGTTGTGAT
 GAATGTCGAGAGAGGTGGTGGGGGATTTTTGTTGTTTTGCTCCTTCCATTTTCTTTCCCTCTGACTTGGGCTGTGGTT
 TCATTCACTTACCTCCCCACCCCTATGCAAGAATAGATCTCTGATCTCTTCTCATACTTTATCTGCCCTAACTCCA
 CTTTCTCTTTCTTGGAGAGGAGAAGAACAACCTCCACAGTGTCTTCTTTTATGTTTTTGGGCTAATTTTGTGTGTGTTT
 TATGGTCTTGAACGTAGAGCTGCCCTCAGCACTCAACACCAGCCCCCTGGACTGTGAGACTAATGAGAAAAGCAAAATGAC
 TTCAAGTAAAAGGAAGTGGTTTGTGTTGTGGAGAGAACTTGGAAAGAAACACCACCAAGAACTAGGGGCTTTATTT
 TCCCTAAAGCCTACAGTTGGGTTAACATTTCAAATAAACCGTTTTTTGGATGACCGGTTTAGCTTCATGTATCCTTCTCTCA
 TACAGTAAAGAGGTAGGGCAAATAAACAAACCGTTTTTGGATGACCGGTTTAGCTTCATGTATCCTTCTCTTACTCA
 TTTCTAGGGAATAATTTCAACTCAAGGAAATGTGAACATCTGTTTTGCAAACATTTACAGGCTGGTTTAAATACAAAAAT
 ACCTTTAAAAAAGGTATGTTTCACTCAACATGTTTTTCCAGCTGTTATTTAAAGCAGGTAGAAACAATATAGTAGGCAT
 AGAAATCTTGATTTATAATGTGGAATAAAGTAAAGTTATTTAGCAGAAATACATTTCTTTTCCATCCTTCCACTGT
 CTGAACATCTCTCTTCTCTACTTCCCTCATTTTTATTTCTTTGCTTTGTTTCTCTCTTTTAACTCAATAATAACA
 ATTTCTGTGTGCCAAACACTGTGCTAAGACTGGGCATGCATGATCACATAAGGTAGGTAAATTTATTTCCCATTTTAC
 AGAAGAAGAACTGAGGCTCAGAGAATTTAGGGATATGTCCATGGTCAATTTCTGGAAGCTGTGGAGCCAGGCTTC
 AAAACTTGGCAGTTATATTTTCAATTTCCACACCCCTGCAGTCAACACTCTGTGCTCCTCCCTCAAATTTTATCTCAGTTCA
 TTTGTTTTCTCCGATCTTCTCCTTTTTCACATGTTCTCTACTCTATCTCTTGGCTTTTTCTTTCTTTCTTATATCTGCCTC
 TTCTTTTTCCAGTCTCTTCCCTCACTCCTTCCCTTATTTGCTTGTGTTTCCCATTTCTTTGTCTAAATCTCCTCTTTTCTC
 TCCCTCTTACCCTATTCACTTCCAGCTCCCTAAAATTTATATCATTTCTTCTTCCATCATGCTCCCTCATTCCTCACTGC
 AGCATCACCCAGTCCAACCTCTGTCCCATCTGTGATTCTCTCACTTCTGCTTTTCGCACCATCTCTCTCCTAAGGTAGAAG
 TGGTGGCCAGCTTTAAACACAAGGCAAAGTGAGGTATGTTCCACTAGGACAGCGTGTGTCACTCTGCTGCCATACACA
 GGGAGTACCATCAGTGATTATAAAGAGGAATTTCACTTCTGCCAGAGAGCTCAAAATTAGGTTATGTTGATGTTTCA

318/375

ATAGTTTTTAGTGACTGGAAAAAGATAATGCCTCCTTCTATGGTCACTACCAGGAAGTGAGCTCCATGCAGCAGACAGA
AACCAACCAGATAACTGTGAGATCCCAGCCAAGCACAATTTCTACATGTTAGTCAATTGCAAGAAACACTGAGATGTAA
TGTAAGTACTTTGGACTCATATTACTCAGGTGACTATGTTTTCAAGCAGCCAGTACAGGACAGAAGAGATTCAATTCCTT
GAATCAAAGCTATTTGGTGACTTTTCTGGAACACTCTGAGGCTTACAGGAAGGGATTCCAGATTCCCAAGCTACTGG
CACAGAGTAAGCATCTTTCTTTACATAGTAATCACAACGTCCTCATCACCATATGACAATATCCTCACTGGATCA
GCTCGGTTACCAGAAATAACTAGATCAAATAAATGTCAATCTCACATGGACACAGGTGGACTAGGGTTAGAAGTTTT
GGGAACCATCACAGTTCTAGGCACCTGAACTTCTTCTTTGCTTGTAGTAAATATGGTGTCTTTCTCAGGACTCTGCC
CTTTGTTTATTTATATATCTGGTCTGGTTTTTGTTTTCTAGAGATAGTTCTCTACTCTCCATAGTGTCTGCTTTCTCAT
TGCTGAGTTTGTACATGGCTTGCCATAGCTTCTCTAGGCCCAATTTTAGGCCATCAGTAGATTTAAAAATTTTTTTTT
CTCTTGACACCAATTACCTTAGTTGCAATTTCCATTATAATTGCAACTTGAGCCTACAAATTTACAAATACAATGAG
GTAACCTTCCACTGTGGTTAAATATTATAGATTATTGGCTGCTGGTAAACCCATGAATTGCCTGCCTTTGGATTAGATA
TTCAGACCAGGTCCATTTAACAATTCAGACATTTTTTTAAACAATACTTTTTTGAGAGTCTTCCATGTGCCAGGCCCTA
ATCAAAGCTCTTGAGATACATTGATGACCAAAAAGAAGCATTATCCCCATTCTTACTCCTTATAATCTAGGGTCCAGCG
ACASGGCGAGATATGCACGTGATTAATGAAATAATCTGTACTGAATGTAAAATTCAAACTGAAGCATTTTATATGAAG
GAAACATCTMTAAAGGAAAAGTGCGGAAGGCCCCAGAACGTTCCAGTCTACACATGCTCCTGGAATTTTATGGGAAA
ATAAAAAGTCTGTGAGAATGGATCTTTTGAGAAGATTCCAGAAGTATGTTGGCCAATAAGAGAAAATGAGCAAGTGGAT
GCCAGAAGCCATTTCTTCCATTGTTGTGCTCAGTTTGCAGTGATACTACTGCAGAGCTTGAAAGGCAAGTACTGGCTTC
TCTTCTCTTGTCTTCTCCACCCAGAAAACCATCCTTATCCTCATATTCTCTCTCCACCTTCACCACCACTACTACCTA
TTTTGAGGCTGCCACCACCACACTATAACATATTCTCTCCCGCTCTAAGGCTCTGAATTTGGACCTCCCATGACAGG
ACTCTAAATAATGACTAATCCATTAAAGTTTCTGCTCCATTTCCAAAATATTCAATTCAAATTTGAAATGCCTGGGGCCTC
TTGTGTAGCCATGGCTGGGCTAATTTCTGCATTTGCATTTTAAACACCCCTGAATCAGGATTACACCTGAAGACTTTCAA
ATAAGTGCTTAGATGGCACAATAAAGATATTCAAGTTAAAAAAAATCTAATGAGTCTGTTGTTCTTTGCAAGGCCCTA
GTGATAGGAACCTCTTCTTGGAATATTGTTAAGCCATTCTCACTTGTAGTCACTCTTGGTACCAAATCTGTTGACCG
AAAAAAAAAAAAAAAAAAAAAAAACTCGAGGAGAGAGGGAGAAAGGCAAAGTTACTCTAATGTTTTAACTAACCATAT
AACCACGAGAACCCAGCCCTAGGAACCAACACTAAAATCTTAAGGACTGTTTTTTCAGACTCTGAAAATCTCCTAAAT
CTCCATTCCAGTATCATTCAAGCTCTTTACAACCGCTGTTTGTCTTAGGCTGTAACTTGTGCTGAAATCCCACTCA
AGGTTCCTTGTGGTATTTTTAATAGTGTGTTGATGCTGCAGCCAGCTTCTCTGCGGTTTGGGAGTTAAATGGGATACAG
CAATGTGGTGTGCTGTAAATGGCTCTTGGAGAAATGTTAGGGCAAATTAATAATTCAAATAGGATAGCAGCTGAAAGAACC
TGGTCTTTTAGTGAAAGAGCGTAGGAAGGAAGGCTTAGAGAGTCTTACTGGCTCCTAAGTGATTAAGAAGAAACATCTA
ACCTGAGTTTGAATTCATTTTGGACTCAAATACAGAGTATTTACTTTAAGACACTGGTCTTAAACACCTGGTTCTTC
CCTGTTTGCTTTTTCTGCTTAGTTAAGCCCAAAGATGGGTGTTAGTTTAAAGAGAAAATGGTACTAAAAGGGAGGAGGGGA
ATAATTAACACCTTTGCTTAAAGCACCAATCCCATGAGCTGATGATTGCCTAGGTTAGGCAATGACTACTACCACTAC
TACCAAACAGGTCTGGCATCTCCTATTCTATCTTGACACCCAGGCCAAGCTGAGCACAAGCATTGCAGGATTCCGCA
GCCTAATGTCCGTGAGCTTTTTCTTTGAACAGTGGTTACATATCGTTAGTGTATTTGAGTCAAATGTGGGTTTAAAGTA
GTGGAAAGACTTTTTTCTGCTATTGAGAACAGAATCAATTTTTTAAATGTGTATGTACACACACAGATACACACACAC
ACACACACACACACACACACACACACACCGCTATATATTTTATTTTGGAAAACAGTTTTATTTCCASTAGATCTTTATT
GAATAACCTATCATCTACGGAGTTCCCTATTTAAAGTTTTTATTGGTAATGGATTTATTCCAGACAGGACAGGTTATAT
GTAAAATACAATTCGTAACCAATTAACAATAACAATAAATCTTGTGCTGAGTGGTTACCATGCAGGTGCTGGGATACG
CTTTCTCTCTACATCATATTTTACCCTCTCCACACTGTTTGGAGGTGTGGATCTATTGTCAATGTCTCCATGCTATAAA
TGAGATGAGGCACAGATGTTTTTTATTATCTCCATGAAACAAATGAGAGCACTGAAGCTTAGAGAAGGAGAGAAACAAC
AACTTGAAGGTTTAGATACTGTTTGGAGGATTATAGTAAAAAGAAAATGAAAAGTCTCTCAAGTTCCACTGAAAATC
TTATAAGTGTGTTTCTTTCCACTTTTGCAATATAATTTTTCTCTTCTACCTCAACTGAAATAAGGTACACAGCCTA
TACAGTATAGAACCAGGACTCCAAGTCACTGACAACAAAGTAAAAGTCAGCAGTTTTTGGAAAATACATATTTTTTTT
TCCTAGCTGAGGATGGGTACCTTCATTAGTGACATAACTATGTCACTTGAATATCAATTATTGGCTTGAATATCAATT
CATTTCTCTATTAAAGAAAAGAGGAAATAACTCAGATATAAATGATGGAAGTGGCTACTGAGTTAGGAAAACATTTGAA
AATCACTTTATACCAAGAAATCACATTTCTGGCAGGCCTAATATGGTATAGGAGATATTCTGTAACCTGGTTATCTTCATTG
AAAGATTATAGAGACTAGAGAATAGGAAGGTTAAGTAAAAACTCTACAAATGATAAAATTTTATGTTAACAAGTAACCT
AACCATACTGTATTTCTGCTGGACTTTATTGTAGACAAAACAGAAATCTGGCAAAAGAAAAACAACAAAAATAGGAA
ATACAGTTACTAAGTTAAAGCTCTTGCAATTTACATTATAAGTATTTCTAAATCCAGTTTAAAGATTGTGGAACAACAAC
AGAAGTATATGAAATCTAAATGCCATTTAATTAAGTGTGGAAGAGTAGAGATTTCAACAGTATCAAACTTGTGAT
CTTCAAGGATCAAAGTAAAGGTGAGTTTATAGAATGCTCACTCTAGGTTCTGATTTGGCCAAGTTCAATCACACCACTG
CCCAATTCAATGAAAATATAGGCAACTTTGTCAAGCAATGAATTTTATCAATGTATTCAAAGTTGAATGCATCTTAGG
AATAATTTGAGGGTTTAGAAAATGTTTGGAGGTTTTTTTTAAAAAAAATCTTCCAATTTAACTGAAAACCTTGTATTTC
CTTTCTACTTTTTCAAATATAGCCTTTGTCTTTTACCCTCCATTGTAGCTTAAGATGTGGTCTTGCATTATAAGGAATAT
TTAAAACCATTCATATTTTTTAAACCAAGACATTCAATTTTTTAAATTTAAATGGAAGTCCCATGTATTCTTGAGTGT
GTAGCTATACAGCAGTGGTCCCCAACCTTTTTTGGCACCAGGGACTGGCTTCATGGAAGACAATTTTTCCATGGATGGTG
GGGAGAGGGGTTGGTTTTGGGATGAAACACCTCAGATCATCAGGCATTAGATTCTCATAAGGAGTGCACAACCTAGAT
GCCTCGCATGCACAGTTCACAATAGGATTACAGTCCCACTGATCTGACAGGAGATAAAGCTCAGGTGGTAATGCTCGC
TTGCCTGCTGCTCACTTCTGCTGTGCCACCAGGTTCCCTAACAGGCCATGGACCGGAAGCAGTCTGTGGCTTGGAGGTT
GGGATCCCTGCTATATGGGCCAGAAATGTGAAAGAGGTGTTCAAGTGGGGAGTATACTTCTAATTTGAATACATTCTTT

319/375

TCAGCATTCTACTTATTTTATCAAAAGGTAATTTTTTCTCAGGAAATAAAGCAATAGGCAATTGTTTTTATAGTT
TTTCTGTACAGAGCCTTATTCAATTATACTACCAATGTAATCCTATTGCACTGCTCAACAGAATCAGAATAAGAAGAAC
TTCCAAGTACAATTTGAAAATAAAAGTATCTTTCAAGAATTTGCACTGTACTGCATTATTTGATTTGGAAAAA
AATCAGACCACCTTCATTTCTTGATGAAACAACCTAATCTTTTGCTAATTTCAACTGGCTCTCTTCAGTGGCTTTGAG
AATGTGGCACTTCCATCATACCTTGCCCTGTAGTACCACCCTAGAACTTTTTTAAATTGAAAATATTTTAAAGATAATT
GATTCGTATGCTTCAAAATTCAAAACGTGCCCTAGAAAGGATCGATTATTAACAGCTTCTTGTGTATTATGTAAACAAA
TCTTATGCATATACAAGCAAAATACATATTGGCTAGCACTCTTAAAAACATAGGAAGGGTTGAATCTGACCAAGTTAAT
ATTTCAAAGGTGCTATCAGAAAGGAAAAGGAAAGCTTCTACAGTTATGTGTATATTTTTTTTTTAGTTTAAAAAGAAT
AAGAACAGATATTGGGTGTGTATGTATATATGTATCTATTTATTTATTGGAGACGGAATCTTGCTCTGTCAACCCAGGC
TGGAGTGCAGTGGCAGGATCTCAGCTCACTGCAACCTCCACCTCCAGGTTCAAGCGATTCTCCTGCCTTAGCCTCCCG
AGTAGCTGGGACTACAGCGTATGTCATCAGCGCCAGCTAATTTTGTATTTTAGTAGGGACAGGGTTTCACCATGTT
GGCCAGGCTGGTTTCAAACCTCTGAACCTCGGGTGATCCACCACCTCAGCCTCACAAGTGCTGGGATTACAGGCATGA
GCCACTGCGCCAGCCAGATTTTGGGTTTTTAAACCTATTGAACTTATCTTTGGATACATATTTAAAGTTTTCCTTAAC
TGTAATGTGTTTATGTTCACTAGAAACACCACATGATTTTCGAGACATGGAATTATGTAGGTGAAATCAGCGGCTTTC
AATTAGGGCTCGATAATATTAGATATAGTATAACTTTTTATGGCATTCCACATACCTCTTCAGGGATACCTTTTGCAATT
CCGGAATAGTGTTTTTCTTGCTTACTTCAGTCGATTTCTTATATCTTTAGGAAAGATCTGCACATTCACTTAGGTGAA
TGTAATATGCATTTTAAATCCATTCATTTGGGAATCTCACTTCTTAAAAATCATGCGGAAAGATAGATGTACATTTTAA
GTAACCGAGCTGTTTCAAGTAAATTTCTTAAGATTATTTTCTCATAACCTCTGTACATCAAAGTGAAAAGAACCTGTCCC
CTTCTCTGTATGCAAAATCCAGAGAAGCACCAGAAGATGAAAGATTCGGAAGAGCACACATTTTCC
AGCCTGCCAGCCTGGGTTTAAATTTCACTTTCCCAAATATTTACTTGGTAAATTCAGAAAAATCACTGGACCTCCAGGAA
CCTCATTTCCATTACTGTCTATGTGGGATAGTGATAACACTATGGATCATTACAAATATTAAATTAGACTGTATGGAGAA
TGCTCCAAAAGCTAAATATTAGTGTCTCAGAAAAGCATTCAACAAATACACCTTTCCAGTTGAAAATGATCATTCCA
TTAAATTCACCTTTTATTTCTTTGAGAAAAAAATCTATGCTTCTGCATTTTCAAACCTACTTTTCATGGATACATAG
TCTGTATAAAAAACAGCATATTAAACATACCTTTTAAAGAACAAAGACATTTATAAAACAATAACAACATCAGCTTCT
GGATGGTTCCCCCCCCCCCCCATTTAAACCTTATTAAAGGGAATACGGTCTCTTAAAGGGGAAATCCAGAGACCTGTGT
ATTCGAGTTATAACCTTGGGTCAAGCAACTTAACTAGGCTGATATTTTGGCTTGATGTGATTTATATGTAACCTTTTAA
GCAATGTATATTAAATCCGTACTTTTTACTCATCTACTTGATTGCAAGCTCCTGCAAGATAAACTTTGTGTAACCTCAA
TGTTGTAACTTCATGGGGCTTAGATATAAACTACAGACTTCATCAGTGTTTAAACAAATACCTTGCTTAAGAAACACAAA
GTCTGTATATACAGCAATTAACATATGAAGCTAATTTTAACTGAAATATCATAGAGGTTAATATTCAAACACCA
CTCATCTTTTTCTCATTTAGTATTATTTTATTTTGTCTTTCTGGAGACATACGTTTACCCTTTATTACTGTCTC
ATTTTGTCTCTCTGAACATACCATTTACAGCTTTTTTAGTTATTTCTGGAAAAATCACTTTGTATGAAATAATAGGCAT
GATGGCTAGAAAGGATCTCACTGATCATCAGTGCAAGGATTGATTTTAGAAACAAGGAAAGTGAAACAGAGACGCCA
GTGACTAGTCTCAGTACTCAGAGAGGTCTAGGTTGGTCAGAGGTGCAACTCACATCTCCTGACCCACAGCAGTTTGG
CTTTGTGCACAACTGACTGCCCTTAGTTAAGGACAGATAATTTCTTTCTCTTTAACCAATAGAAAATTAGACTAATTAAAG
TCATAAAAGATGTTGCTCCTTTATAAGCCATAGAGAAACCCCGATGGTTTCTTTATTTGGATCTGTGATCTTTAAAGC
ATGTGACTAGCAGCTATAATTGGATTAAAGTGAAACATGTGATTGTGAAGGAGTTAAAGTACCTTTGCCCTTATTTCTGC
TTTGATAGCCAGCTTCAATTGCACATCGTGACAAGCAGTGAACCAACATCAACCTGTGGAATTTAAACTTTAGACTCT
ATCACAAAGCTTTTCCAGTTCAAAGCCCACCAATTTATTATTGGTTCCAAGTTCTAGGTCTAGAATCAAGTCAGCTGGG
ACATCAAATACTTGTTCACAAATGACATTTGAATGAGATAATTATAAATAGCACTAGAAGCACATGAATTAATATTGC
CTGAACACTAATTTTCTTAGGTAGGATATTGGGATGTCTTTTGTCTTTATCACTTTGCAGTGATGTGAGCAGTATGAGAT
ACTATGTTTTGCAAACTGTATTAAATTATAATTTATTGAGTACTTACTATGTCCCCATGCACAGTCCAAGTTTTTCAT
GTACATATTATTATTAACTTCACTGCTATGCTTGCAGATGGATGTGTGGTATATTTTAGTTAACTCGCTCAAGGACA
TGCACAGTAAGCGGTGCAGCTGAAGTCCAGACTGGGTGAGGCTGACTCCACAACCTCTTAATCCCTATATTAAATTGAT
ATATCTGCCCATGCTATACATCTACTTGATCTTTAGGTTGATTTATTGATAGTGACATTTAATTTTTGTTTTCTTCAA
ATTAAATTTACTGTAAAACTAGTCAAGGCAACTGAAGTTTGTGTTTGAATAAAAGTGAGAGTTAACTGAGGATTTG
TGATTTCTCATTTCAAGATGAGAAGGGAGGGAGGGAAGGAAGAAAGGAAAAGAGGGAGGGAACGGAGGAAGGGAGG
GAGGGAAGGAGGGAGGAAGGGAAGGAGGAAGGGATGGAGGCAGGAAGTAAGGGAAGGAAGTGAAGGAAGGAAGGA
AACAGTAAAGGAAAAAGAAAGGAAATAAAAAAGTAACCTTCTCTATAGAATCTCTATTAATAAATGTATTTTTTAA
AAATAAAAAATACAGTTATTTTTTTCATGAATATAAAATTTTGAACATATTTTTCAGTGCTCCTTACCTAATCCCAATAA
TCCATTACTTACATTTCTTTTTTTGAGATGGAGTCTCGCTCTGTCCACCCAGGCTGGAGTGACGTGGCAGCATCTCGGCT
CACTGAAACCTCTGCCTCCTGCTTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGACTACAGGCGTGTGCC
ACCACGCCTGGCTAATTTGTTGTATTTTTTAGTAGAGATGGGGTTTCACTCGATCTCCTAACCTCATGATCCGCCCCCT
GGGCCCTCCAAAGTGCTGGGATTACAGGCATGAGCCACTGTGACCAGCCATTTTCACTTTTATAACCATTATGAATTC
CCACCTAGTTTGAGAACCCTACTTTTGTGTGGTTTCCACCCTTTGTGTGATTTCAAAGGCTCGCCTTTAGGCAAAA
TTTAGCAAGAAGTCAAGCCAATCAATAATTGCTTGAAGTCAACTTTTCCAGAATAAACTGTATAAGGGACTTTGAATT
TGAAGGTTACMATCTAAAGTTTGTCTTTGAGATGGGAATAATACGTAGTGTGGGGATTATTGTAAACCTAAGTGATCTA
ATTGGAATTTAGAAATGAAAGTGGAAGGAGGAAAAATGAAGGTTGGGGAGAAAAGAAAGCAATTTAGGAGA
CTCTATAGGGAGGAAGGATGAGATGCATTTTCAAGAACAAAATATTAAACGTAAACAGAAAAAGAGAAAGCAATCATGA
CAAAGCCTAAGAGGGCTAGTGGAAATGCTAGAATGAACTCATTTACCTTCTTTGATATTTAGGGGCTCTATTGCCTGCT
AATTTTCATCACTGTTATTTTTCTTACCTCTTATCTTTTTCCCTGTAGTTATTATCAGCCTAATATTTCATTCATTCATTC

Fig. 6.314

320/375

ATTACCTGAGTTTTTCAGGCTTGTGCAGAGACAACAGGGTGGGGCCAGGTTGCAAGATTGTGTTCCCAACTTGGAAGTA
ACGTGGGTAAAGGAAAAAGTCACAGCTGGCCTTAGAAGACACAAGTTAACACATCCCATGGGTGAGTGAAGAAAAACA
GGGAATAATTAGAAAAGTGTGCAAGATCAGAAGGGAGCCCCCTGAAGCTATAACTGCAAGAACCTCCAGACCCATTGCCC
TTTAAATCCCCTTTTTAAAAGGCACCAAGTGAGGAAAAATCCAAGATGAATGGGTACGGGTCTGACCTTCAGGAACATG
TAGGCTGCCTGCCGATGTCCACAACATCGTCCCTTTACATAGCCCTAATACATTAGCGTGGGCCACTCATTTAAAAATTTA
AAAAATTTTCATTTAGCATTTAAAAATTCATTTGACAGAAGAGATGTTTCAAATAAATAGTCTTCAAAAAAGCCCGGTC
TATAAGTCTCTGTAAACACAGCCCATCTGCTTTAGGTGAAGTGAGGCAGTAGGCCTGGAGCCCTCACCTGGTGGCTCTTA
ACCACATTTACTTTCCAGGAGAAGCCTTTACCAACTTCTCAGAACCTCCAAAAACACCAAGGAACAAGATCCTGAAAT
TGTCATAGTCTTAACTTTGTAAACAGACTGCATGCCCCCTGGAAAACTATTTCACTTCTCTGGCCTCATCAACA
AAACAAATGTGGCCTAAAATACTTTGTAAAGATGGTTTCAGTTGTAAACAGCCTGAAAACTCTTAGTACAACCTAATTGG
GCAAGTAGGTTTGGCTACAGATAAAGAACAGAAAGACTTAGACAGTGGTATACATTACTCTGAAATATTTTTATTATGT
AAGTACAAATAAATGGATGTCTAATTGTACTTTTCAGGTAGCAACATTTGTAGGAAATGCATTTTGTAGGAATTTTA
AAATCACTGAACAGATTGCCATTTAGTTTACATTTTCTCTCACCTGCAGATCCTGAAACCTCTGAACTTTTCTCTGC
CACATAAGTCAAAATATCCATTTATAGTTTTTAACTCTTCTCTTGGCCCCCTAAAAATAGAAGATCATTCTGATTTTAA
AAGTAGCACTTGTATGCATATATATAATTTTTATCTTTAAAGGAATACGCTGATGATTCTGACTCTAGCCAGTCCCTT
GCAACCTTCAAAGGATTGTCTCCTTGGCCCTAAGATGTAACATTGTTAACCTTTTATGACAGAATCACGTCAAGGAATA
TTACATCTCTTCTAGTTCCCTGTACCATATCTTTATGATAAGAATGTGTGCTTGCCATCTCAAAATATTGACCCCTCTGGT
ACAATCACTTGTATCTACTTGAATACAGATGTCTTGTTACTATTTCTGGAAAAATATTGAGTAACAAATTTTTCTCTGAA
ATATTGTTATTAAATTTTCTTAAAAATGTTTCTAACCTTCTTTACTAGAGCTCACTATAAGGTAGTCTTTAGTTTAAAG
AACTTCAACACTCTCTGATTTTGGTTTACCATTTTCATTTGTGCAAAATGAATGTGTACATAAGAATCTGTATTTCCAA
CCCAAAGAGGCATTATAATGACCGTTAAATTTTCCATCCAAGAAATAAACTAACTCCACCATCCCTGAGTGTATACCCCT
GCCCTTCTCACTCTTGTGTTCTTTAATTAGACCCAATGTGCAGGACATGACTTGACTGAAATTTATAGCCACATTGAGA
CATCGACTAGTAATACACAGGTGCAAGTTATAACTACTTAATCTGCTCCAGCATCTCTGTTGCCCTTGAGAAGTATGA
TGTCTCTAGCCAACATGCGCTGTTTCATATGGGACTGAATCTGCACATATTTGAATTGAGTTTTTCAAGTTTAGAAATGT
GATACTATTTTACCCCTATGTGCCCTTCCACAATCCTACTCCTCTCTTAGGTGGATCAGAGTTTTCTGGAATCCATCATCT
TTAGTTCTGCAATTTACATCTCAGACTTACATGTTTCTAGGCATAAATGCAAGAATGACAACATCAAGGCCATGAAAC
TTAGACTTGTATGTATGTGATGGTAGACATTTGAAGTTTGTGTCAGGAAAATGTTTCTCTGTCATCCTAGGAAAAGCCCC
CAGTTTCTCAGTTCTCTCTCTCCACACGACAGTTTTTTTAGTTTTTTTAGTTTTTTTAGTTTTTTTCTAAAATGGAGTTA
AGTCCAGGTGCAATAGCTCACACCTGTAATCCTAGTATTTTGGGAGGCTGAGATGGGCAGATTGCTTGAGCCAGGAGT
TTGAGACCAGCCTGGACAACATGGCAAAACCCCATCTCTACCAAAAATAAAAAATAAAAAAATAAAAAATGGCATGG
CAGTAGGTTCCAGTAGTCCAGCTACTTGGGAGGCAGAGCCTGGGAGGTTGAGACTGCAGTGAGCCGTGATTGCTCCAC
TGCACCTCCAGCCTAGGCGACAGTGAGACCCTGTCTCAAAATAAAATCCAATTATGATCATACCTCTCTCTGTTGATGT
CCATCAGAGTCTGCAATGCCCTTCAGGGTAAAGTTTAAACTTCTCTTAGAAACAATGTTCTGCGGTAAATGACCAGGG
TCTTTGGTATTAGATACACCTGGCCTCAAAAAATGGGTGAGCCAGGTATAACCTTCCCCTCTCTCTGTTTCTCTCATCT
GCATAATGGAGTAACAAACATTGTGAGGAAGTTACTGGAGTAATGTGTGAGATACCAACATAAAAAGCCTGGCACAA
AATAAAAGCTCAGTAAATGTAAATGTCTGTCTTTTGCCCTTCCCTCATTTGTCTGCGACTTACCTTTCTAGGTTCCCTT
CTCCCATGTGCATCCCTTCTCTTCCAAAGCACTCATTGATTCTAGCCTGCAGTGTATAGTTTCTGTATCAAGCCAAGCT
CTCCACACCTCTGTAACCTTTGCGTATATTGTTTCAGTCTCCCTGTAAGTCTTCCCTACCTTCCACTTTTATAGAACT
GCAGGTTACCTACTTGGCCCTTGAGATAGCTATTCCTGAATTTCTCCGAATTTAAGCATTCCTCCTCTATACCTTTCAT
AAATCTTTTACACACCTCTTTCATCTTACAATGTGTAATATAGTTGGTTTTATCTGTCTTCTTAAATGTATCCTTAA
CTCCTGAGAGTGGACGCTACATCTTAGTCATGTAAACCCAGAAAATGTAATCAAGCTAAAAATGGCTCACTCATTT
CCTAGCAATATTGGTTAAATGACTGAATGGATGATACAGGGGCAAAAATAAATATGGTTTTAGAAAAGTGGCATGGCT
GCTGATCTATCAGTGCAAAAGGAGCACACCCACCCACTACATGGCCAAAAATGTTGAAGGCAAGAGACTAGATGGCTT
GTGAATAATATCAATGAAGTTGTCTTTCTGTAGGAAGTCTTAGACAATGTAATCTTGGGAGGCGGGTGGATCACAAGG
TCAGGAGTTCGAGACTAGCCTGACTAATATGGTGAAACCCCATCTCTACTCAAAATACAAAAATAGCCAGGTGTGGTGG
CATGCACCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCACTTGAGCCCAGGAGGCAGAGGTTGCAGTGAG
CTGAGCTCGTGCCACTGCACTCCAGCCTGGGCAACACAGCGAGATTCCGTCTAAAAAAAACAAACCAAAAAAGAAAAT
GTAATCAAGCTAAAAATGGCTTTGGCTTTCTTTCAGTAAATGGTTACTGTGGGAATATATGTGAAATGAATATCAATACT
ATGATGAGAAACACATGCACTAAACAGCTATACTTCTGATGCCATTCTCAAATCTGAACTTTGCCCAATTTTCAGGGAC
AAAAGTGAAGTAATATGTATCCCCAGTGTTTAGCTTTTCTCTTGCCATGGATACTAACAGTGAGATTCTCAGGGACTG
TTCTTTTAACTCGTTAGGGTTGCTAGGGGCTATTGTGCCTTTCAACAACACAGCACCTGCAACTGGGAATAATTGAAAT
TTTCTGCCATTAGCTATTCCCAGCAGAGTATTCTGAGTCACATAGAAAGTGTGAGAAGCATATAAATTACTGATACATT
TTTTAATCCCATATTCCCTCAGGGTTGGCGTTTTTCTCTCTTGAAGTTTCCCCCTTAAGGCTGGGCGTGGTGGCTTAC
GCCTGTAATCCAGCACTTTGGGAGGCGGAGGCAGGCAGATCAAGAAGTCAGGAGATCCAGACCATCCTGGTTAATACG
GTGAAACCCTGTCTCTACTAAAAATACAAAAATTAGCCACGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTAGGGA
GGCTGAGGCAGGAGAATGGCGTGAACCCGGGAGGCGGAGCTTGAGCGAGCTGAGATCTCGCCACTGCACTCCAGCCTG
GGCGACAGAGCGAGACTCCATCTCAAGAAAAAAGAAAAAAGAACTTCCCTCTTAAAAATATTCTTGTTTAAATCT
AAATTAATTTTATAGATACCATTTCCATTTTCTAATGAATAATACTGTATCCTTTCTATCTATACCATGAAGTTTTT
CTTGGCCTTGAACCCATTTAGATTTATGATTTCTAGCCCCCAAAATAACTTTTGTTCCTATATCCAATTCCTTCCCT

Fig. 6.315

321/375

CACAGTTCTTTTCAACAATAGCTTCTTTTCTCCTGTAAACCCTACATAAACTCCAAAAACGTTCTAGTTTGTGGAAATCC
TAATCCAAGAGGTACATCACTAACGCAAACGTAGAAATCTTTGTACCAAAGGACAGAGGTGCAAGGGAAGTCGGGAGT
TGTGGCTGTGGGAAAGTGAGGAGGACTCTTTGGCATCTGGGCAGAGGTACAGGGAAGCCAGGATGGGGGCAGAAAGAAA
GTTTCTCAGTTTCTCTTGTGTCTACGGTTCATGCTTAGGCCTCTGCAGCAGCCCCAAGGCAGGTGAGGGTGATCAGCTG
TTCCAGTTTGCCTGGCACTGAGGGATTTCTGGGATGTGGGGCATTAGTGCTAAAACTGGGGAAGTCTTGGACAAATT
AGGACAAGTTGGTCACCTACCTTTCCCTTGCTGCTGCTGCTCTTTTAAAGTCCTCATTCTTTGAAAATTGCAGTGT
CTTCAGTTCTTCGTGATTTTAACTGTATACAAATATTCAAAGAGCTTGGACCAGCACATTTCTCAGAGAGAGCTCTACT
TACAGTAAATGTTATGTGACAGAGCAGGATAGCAAATAGATGTTACCTGGGGCAACTCTAATTGCTTGGTCATGACTGT
CGGGAGTAAAGTGTTAATAGTTTCTTGCATATCCTCCAAGAGAGTATTACAAATACTATTCTGCACCAAGCTCTTTGTA
ATTTAATAGTGTATCTTGGGGCCCTTTTGTATGGACTTATACAGATCATGATCTAGAGATAATGATCATTCTTATTTGA
CACATAGTATTGCATTATGTTATGTCTAAAAACCCATTTAACTCTATTGATAGTCTTGTGGGTCAATTTCCAGTTTTTAC
TACAATTAATACAAATAACACTGCAGGCATCCTTGTGCCCTGAACATCTTTGTGAGTTTACCCATTGAATAAAGTCTTAG
CTGTGAAACTGAATTTAAAATTTTCATAAATATTGCCAAGCTGTCTTCTAAAAAGAAATATATTAAAGTTACAATCCCACC
ATCATCACAAGAAATGCTTGTATTTCTATACACACTGACCCTGAGATTACAAAAACATATTTTCCCCATCTAATTTA
ATTGCAAAGAAAATTAGTCACCTTTTATACATTTATGGGCCAGTTCCTCCTTACCTCCAAAGACTCATTGAAATCAATTA
TCTTGAGGAGTTTATTTTTTATGGATATGTTAATGTTTTGAGTATATTAAAGAAAATGAACTCTCCTCATTGTGTAAAC
TTTTCAAAAATTTTAAATTTGTTTAGGTTTTTTTTTTTTTTATCATTAGTCTTTTTAAATATTTGAGTAGTCAAATTC
TCTTTTCAGATGGTTTCTGGACACCTGTATCTTTATGCTTTTCTTGGCATTCCGGTGCAGTACCTATCAGAAAA
TAGATTCTCAATAAATGTTTTTTTTTAAATAAATGGACAACGAATGCATAAGTGAAGGATATAATTTATCTTTTCAT
TCCTCCTCATGCTATGTAGAGATTGCAAAATGAATGCCAAAACATATCTTTGAACAGAAATTCATTGGCCAGTATCTT
CAGGCAGTGGTTTTTCTGTTTTGTTCAAATGATGTCCCTATCATCTGCATAGTGTCTGGCGTATGGGAGATATACGTAT
TGAATGAATACATAAATATAGAGAATAATGAGATAAATAGAACGTGGGATTATTTGGAGTTCATCCTCCTGAGCTAATGA
TGGGCATTTCTGGAAGTGCTGGGTGCAATAAGTCCAGACCAGAGAGGATTGTGTTTTAAAGGCCCAGAAATCTCAACTG
ATAATCCTCAGAAGCTCAGATTTACTTTTTTTCATTCCAAGTAAATTAAGTGGAGTGGTAAGAAAAAGAAAAATGGTTA
TGACCATCAACCCAGAAACAGGGACCACATTTAATTGAATTTATAATGTCCCTAACATCTCTGCTGTGTTTGAAAGGT
TAAAAATTTCTTAGAGAAAACAGCTTTTGTCTACTACTTGCCAAAGTACTCATAAAATGGACTGATTGCTAAGAACAGAA
AACAAACCAAATCAAAATAAAATGAACCAAAAAGCAACAGAAATAAATGTGCCTTAATGTAGTTGGATGATTACCACAT
CTACTCTCCTCAGACCACCAGCCTTCAGAGTAAGGGCACATCCTTCCAAATAAGTGCATCCTTGTGAGGGACATTTGGT
GAGGTGCAACCCCTTCAATGTGTCCGTTTCTTGGGTCAATTTGGGGTCTTAGGAAAATCTTCTGTTGGTGCGCACTGAA
TTGCACATGCATTATGTAACTCATTGCAACCCCAATAGCTGAACTCATGGTTTCATAGCTATTAAATATGCCACAAACC
AAACCACCTGTGAGGCGCCAACTCAGCAAAATGTGCCTTTTTCAGAAAAGTAGTCATAAAAAGGTACAAAAAATGAGGATGAA
AGAACCCTGAATAACAACCTAGAGCTCATACATTTGGAGCCATGAGGAAAAGTATTCCATGTAAGTTGAAGGAAGATAG
CAGTCAGGAGCATTTGGTGTGAAGACCACCTCACTATGAGAAAGGGTCATATATATAATGTGGAATGAATCAGAGCTA
CCACTGTGGGTCCCTGTGTTGGAAAACTGCAATTTTGGATAATTATGTGCAAGCACTAGGAGAAATGCCAGATGTTAGA
ATCCATTTTAAATGTGAAATATGCAATTTGTGTTTGCAAGACCTCAATATATAGCTTTCTCTATAAAATGTGGGCATA
TTTCTGAAGGAAAAGAAAAATGCCAGGGTTTCGTTTAAACATCCTGTTACGTTTATGTTAAATTTCAAAGGAACATGACTT
TTCAAAGAGAAAACTGTCTCTCTCTCATAAAATAGCATTAAGTGAGTTTCCAAACATATCTTAGTTATAATTGAAATTTGG
ACTCTGTGGAACAAAAATTAATGATGGTTTGTCTCAAAGGCCCATTTGTCCCGTTGATTTTATCAGTTATTCTTTGTTAA
TAAGGTGGTAATGTGGTCTTAAGAGCTTCCACTACTGAGAGAATCCAAGGAATCATAGATAAGTAAATGATGTCAAAT
ATTATGACTTTTTCTCTTTCATTCTTGTACTGTATCTAGTTGCCTCATCTTTTTTTCTAAATCTCACAGTTTTTGTATCA
AATTCCTAGGGACAGCTTACATGCTAGCTTTATGAGGGAGGTGAGTCATGCAATCCCAAGAAAGCAAAAGTGGAGTTG
AGGGGGTGAAAGGAACAGCAGTAGGGAAGAAGAGAAACCATGTACAAGGTAATGCATTACTAAGCTTGTGAGAGCTTCC
CAACAACAACAACAACAACAACAACAACAACTAGTTGCTAAGTTACAAGGGACATTGCCTGTGAGGCTGTGTCGTAA
AACATTCACATGGAGAAGAAAGGGTGAGCAATTTTTCTGTGCATAGGTCTTTTGTCTCTCATTGGTCAAAGTTTGCTC
CATGGTACCCCTTGGCCCTCCCAGAGTCCCTGGGGAATACAGAGCCTTTGTCCATCTCACGTGTAGCTGGATGGTTCCCTG
TCAAGTCAGAGGCCATTGCCCACGCTAAGCCCCGCAAGGATGGGGAGGTGGAAAACATGAGGCAATTGCAGTGATAACCG
CTGCTTTACTGGGGCTGCTGTGGCATGCCTGGGAAACTGGGAGAGTGGCTTATGCCCAAGGGGTAGGGTGGGCAGAGCT
GACCTGGGGAGGCCACAAACAGGACCTAGTGTACTTTTCTACAGTATACTAGCAGAATTAGAATGAATCAGACAAGAGA
TTTATTAAATTAAGCTTTTGTAAATGTCTCTGATGTAGTGCATGATTTTAAATGCTGTGTCTTCTGTTGCTTGAAGTTCCCT
AATTTGTACCAGGTGTTGTGCCAAATGCTTCAAATAAATTACCTTGTGAAATCCTCACGACTCTATGGACTCCAATTTA
CAAATGAGAAAATCAAGACTTAACTTGCTTATTCTTCCCAAGGCTAGGAAGTGGCAGAGTTAAATTTGAATCCAGGT
CTAAAGCCATTGGTCTTCTTATGCCATAGAATCGGCATCCATTTTGCTACTCTTACTAGAAAATCATGAATCCTAGCTAT
GAATGTAGTGAGGAGGAAAGTTTTTCTGTTTCATGTTTATGAAAAATCTCTACCTTTTTTCATTTTTTTGGTTGGTT
TTCAATTTGGCCAATGGTTGGAAACAGGCAATTTTCAGAGATTTTGTGTAAGAGTGTGTGTATATATATATTGTATATTT
ACAGACAGAAAAAATGAGATTAATTTTTTCAATTTCTCTAAGTCAATAAGAGAAATGGAAAAACAGAAATGGACAAGCAGA
ATTTTTTATCCCAATGTATTCTTTTGACATACACTGGTCATAATGCTAATGTTAGCAAAAGAAATAAGAAATCCCTGGT
GCAATGGGATGATTGACCTTCCTTTAGCAGAACAGTGTGACTTGTTTACCCTGTGCTCAATCAGACTGAACACATTAAC
AACATGATCATTCTACTTGTGGGTTTGGACTGCAAGGACATTTCTAGTATATCTTGTGTCATCAGGTTAATAAGCT
CTAAGCAAAGCTGAAAATGAATGCTACTTCCCACAATCAAGTGGAAATGTTAATATTATCAACATGTCTTAAAGGCCAT
GAAGTCTATGCCTGTATATGTAACAGGAATAGCAAACAGGAACCTTTTCTTAAAGGGAAGATTAAACTAGTGTATTTT

Fig. 6.316

[illegible]

Fig. 6.31~~7~~

323/375

[illegible]

324/375

CCATGCGCTTAGCTACTGGATCAAGAGAGACATCTACCGGCTTTGGGAGATAGGAATCTGGAAATTTGACAGACTGAAAC
AACCAAAACCAAGAAAAAACAACCAAGAGAGATGCGAATGCCATTTTAAAAACCCTAAGAGGCTGTGTC
TGATGTTACAGGACTCTTTGACTCCATTAGTCTCAATTCTAATATTTAAGTTAAGTGATTGTGGGCATAGAATTTTTTTT
CAAAACCTGTTTCGAAATGAAGGCTTCCCATACATTGAAGTTAAAAGTGGTCTTGAGAAAAGAAC'TTCTTAATAGGTAA
GGGGTTTTACTTTGGAATGTTGAAAATGTTTGGAACTAGATAGAGGTGGTGGTTGCACAACATTGTAAATGTGCTAAAT
GCCACTGAATTCCTTGACTTTACTATTTTAAAGTTTATGTGATATGAATTTCACTTCAGTAAATTATCTTTGTTGGTGCA
TAATTACTGTATATATTTATGGGGTTCATGTGATGTTTTGTTACATACACAATATGTATAATGATGGAATCGGGGTATT
TACGGTATCCATCACCTCAAGTATTTATCATGCCTGTGTGCTCTCTTTCTAGCTATTTTGAATATGCAATACCTGTTG
TTAACTCTAGTCACCTAATCTGCTATGGAACATTAGAGCTTATTCTATCTGTGTGTTTGCACCCATTAAATCAATCTCTT
CATCCCCCTCCCCCTCCACCTACACACTCCTCCCAGGCTCTGGTATCTATCGGTCTACCTTCATGAGTTCAAGTTTTTTTA
GCCCCCTGCATATGTGAGAACATGTGATATTTATCTTTCTGTGCCAGTTTATTTCACTTAACATAAAGATCTCCAGTTT
CATCCATGTTGCTGTAAATGACGATTTTATTCTTTTTTATGGCTGAATCATATTCATTGTGTATACCATGTTTTCTTT
CTTTCTTCTTTCTTTCTTTGCTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGAGATAGAGTCTTGCTCTGTCTATCCAGGCTGGA
GTGCAATGGTGCCATCTCAGCTCACTGCAACCTCCGCCCTCCCGGTTCAAGCAATTCCTCTGCCTCAGCCTCCCAAGTA
GCTGGGACTACAGGCGAGTGCCACCATGCCCGGCTAATTTTTGTATTTAAGAAGAGATGGGGTTTCACCATATTGGCC
AGGCTGGTCTGGATCTCCTGACCACGTGATCCGCCCGTCTCGGCCCTCCAAAGTGCTGGGATTGCAGGCATAAGCCACT
GTGCTTGGCCGTATACCAACTTTTCTTTATCCATTATCTGTTGAGGGACCCTTAGGTTGATTCTCCATCTTTGCTATT
CTGTATAGTGCTGCAATAAACTTGGGGATGTAGGTATCTCTTTGATACACCAATTTCTTTTCCCTTTGGATAAAATACCCA
GTAGTGAGATTGCCGGACATAGTGGTTAGTTCTATTTTGTATTTTGGAGAAATCTCCATGCTGGTTTTCATAGTGGCT
GTACTAATTTACATTCCCACTGGTGATATGTAAGAGTTCCCTTTTCTGCATCTTAGCCAGCATCTGTATTTTTTTT
TTATTTTTTATTATTTTTTGCATTTTTTAATAATAGCCCTCTAACTGGGGTAAGATGATATCTATTGTGGTATCAATTT
GCATTTCCCTTGATTATTAGTGATGTTGAGCATTTTTTCATATTGGACATTGTTATGCTCTTTTGGAGAAATGCCATT
TATGTCCTTTGTCCACTTTTAATGGGATTGTGTGCTTTTTTACTATTGAGACGTTTGAGTTCCCTAATATATTCTGAATA
TTATTTCCCTTGTGAGATGAGTAGTTTGCAATATTTTCTCCCATTTAATAGATTGCTCTTCACTCTCTTGATTGTTTG
CTTTGCTGTGCTATACAGAAATTTTTAGTTCAATACAGCCCCATTTATCTATTTTGGTCTGTGTGGCCTGTGCTTTTGA
GGTTTTAGCCATAAAATCTTTGCCCTAGACCAATGTCCTGAAGTGTTCTTCTGTGTTTTCTTCTAGCAGTTTTATGTTT
AAGTCTTTAATCCATCTTGAGTTGATTTTTGTATGGTGAGAGATAGGGGTCTACTTTCATTCTTCTGCTTATGGGTGTC
CAGTTTTTCCAGCATCATTTATTGAAGAGATCTCCTTTCCCTAATGTATATTCTTGGTGCCTTTATAGAAAATCAAATG
TATCTATCATTATGCTCTCTGTCTACTCTAAATCTATCAGTCCACTCTGTAAAAATGTGGATTGTTTCCAGGCTCTCT
GTATTAATCCATTGGTCTATGTGTCTGTTTTTATACCATGTTGCTTTTGTACTATAGCGTTGTAACATATCTTGAAGT
CAGGTAGTGTGATATATTAGCTTTGTTCTTTTTGCTCAGGATTGCTTTGGTTAGTTGTGCTTTTTTTTTTGGTTCCATA
GAAATTTTAAGTTTTTTTTTATTTCTGTGAAAAATGACATTGGTTTTGATAGGGATTGCATTGAATCTGTAGATTGCTT
TGAGCAGTACAATAATTTTTTTTTTAAAGAGAAAAGGGAGAAAGAAATTGGGCACTAAGTACATCAGAGTAGATGTTTAT
CAATTTTTTTTAAAAATGGTCTTGCGCTACCATAAACTGTGATGTTCTTGAGAGCTTACATTGTGTCTTGTGATTGTTGGA
ATTGTTGATAGTCAAGGTGCTGACACATAGACTTGATCATATGATTAAATCAATGAATGAATGGATAACTCTGACC
TCTCTTTGATGAAGTGCACGTGATGGGCTACCACTTGACTATGCTGTGGGATAGATCAAAGAAAGGTAGGACACAA
CCTTGAACAAAAATAAAGTAACCTTACGCTGTGTTTATAAAAAAGTGTTCTGTGTGGAGAAATAATGAATCTTTTCAGATTT
TAGAGTGTTGCTGATTGATTTCATTTTGCATTTTTTAACCATCAGTCTCTGTGTGAACTTTAGTTTATAGGTAGGACTTT
TGATTGAGCTTGGTGGCTCACACCTGTAATCCTGGTGCTTTCGGGAGGCCGATGTAGGAGGATCACTTAAGGCCAGGAGT
TTGAGACCAGCCTGGGGAACAGACTCTACTAAGAATAAAAAAATTAGCCAAGCAGAGTAGTGCATGTCTGCAGTCCCAA
CTACTTGGGAGGCTGAGCCTGGAGGATCCCTTGAGCCCAGGAGTTTGAGGTTACAATGAGCCATGATCCCACCCTGCA
CACTGGCCTATGCAGCAGAACAAAGACCCCATCTCAAAAAGCAATGACACACAGAAAAGCAGAATTTTAATTTGTTCTG
CTCTTGCTCTAGCACTTCATATCCATTCTCTGAATATGAACAGTGGGAAAGGTAGTGAATTGAAATGGATCATAGA
ATGTTTCCCTCTACTGATAATTTTTACTCCATTGAGGATGATTGAAGAGCTAATGTCAAGATGCACAGCAGGACTCAA
TGATTGAAAAATAGTGTTACTGATGTAAAAGTACCATATTTAAGCTTTCTTTATGATAGTCTTCCATTATTTCTCTT
GTCATATTAGCACCACTGGAAAAACAAAGTTATACGTAGGGTAGAAAATGTAATGACAATTTGGTGTTTTATAAACAA
TAATAAATCAGCTTTTCATGAAATTAGGCTATGTCTCTGCTCTGGGTAGTGAACCTTACTTTTGCCTGAGCTCACTAAAT
AATTATTTCAATTTCCAGATAAAATGTACTTCTGTGGACAGAGGCCATATGCTGGTAGCCCCATACAAATATATAGAGA
GCATAAATTTCTCTTCTCTTTGGTATTTAAAATTAGGATTTTTATAAAATGCATTTTATTCTTTTGGCTTCTCC
ATCATTAGAAAAGATTCTGGATCTGTAAACCAAAAATAATAGTAATAATAATGATAATAAGATTTTGGCAATTTAAAGA
GAAATTCATTTCTGTAATATGGTCACGCCAGCTATCTTTGAACTTAAAGGAGGCAGGAAGAACATTTGAATTAAGA
ATTTTGGAGTATTACAACCTCATTTGGTTCTCAGAAGCTTTTTTAAATTTATCTTCTCCACGCCAGTTTATACAATTC
TCTCATGCCCTCACTTTACTTTTATATCTTTTCTTAAAAACAGTTTTAAATTGTATCTCTCCCAACCCCACTTTATACAATT
CTCTCATGCCCTTACTTTTACTTTTATATTTTTTCTCTCCATTTCTTCTGTTTCACTTCACTCTCCCAAGTCTCTGG
CCTAAGTTTTATTTGTGTGGTATTAAGCAGAGAACCAAGAACAGTGTGAAGACTTCTTGGGGATAAACCAGGTTTCA
CTTGAATTTGTGGTGCGTCTGCCATTGGTGTGGAAGCAGGGCAGAAAGAGGACAGAGGCATACCAGCAAGTACAGACATC
TAAACACAAAAGAGAGGAGAACCAACCTCAGGGATACTCCCTCAGTGCCTGGGAAGAAAGCAAACTTAAAGTGTCTATAG
AATTGTAAATAAACTCTCTCTCTTTGAAATTTATGTTGATGGTTGCTGTGTAGTTGCAACAGTGTCTATAAAGTCCAT
GAGGCCATTTTTTTTTTGGAGTAATCAATATTGTGGAAGAGTGTAGAGCAGACCTACCTTATATAAATTAATTTGTTTGA
ATTGCTCTATTCACTATGAATAAATATTTATTGGAGTACCTTCTATATGCTGGGGACCTCAGCCATGAGATACGCAGGT

325/375

GGAAAAATAACACTTAAGCAGCTTATTGTATAGCAGAGAGGTGGTTGAATTGATAGACAATTAATAACAACGTGTTG
AAAGGCCGTGTTAAAGCCACAGGGTCACTCAGTGGCAGGAGGGATTCAAGTCAAGCTGGGCCAGCCATGGCAAGTAAGTGG
CCTTTGGAAAGTTACCAAGGTAAGACATACCTGATACGTTCAAGAAACAATTCCAAGGTTCAATAAGGCCAGAAAGTTAA
AGGGCAATGTAAGCCCTGGAAACTGAGGCTAGAAAGGTAGAAGGATCTCTTTTTTACCACACACTGTGCCGGGCACCATG
AAGAATACAAAATAGCTAGCTATTATGGAGCCTACACTTTAATGTGTGTACATAGATACATGTCCATGTTGGAATTTAA
CTCCTTGAGAGGTCATGAATTACTTAGTCCCGGAAGCATTGAAATTTATACTGGAAAGCTATAGTAGAGAGTTGACAAA
ATATTTTAAATGTAAGTAAGAAGATTTGACAATCTATTGTGTGGTATGCTAGCAAGCCAGTTCTCCTTCTCCTTTTCT
CACCATCCCACCACCCCTCACAAAATAAAAAAAGTTAAAAACCTGATCTGCAGTGTGTTGTCTATGGCCATGGTGC
AAATACTCCTCCCATGGCTGGTTCCAAGCTACCCTGGTTCAACAGTTCTTTTGCAGAAATCTTGAATCTTTAACACTT
AACAGATCCAGTTCCAGCATATTCTGCAACAGCGATTCTGCAGTTCTCAATGTCAAATAATAGAACCAAAAAGTCAT
ATAAGTACTACAAAGAAGAAGAGAGAGTTGAGAGCCAGCTTAGCCAGGAAATGCTCCAGGGGAAGTAAGGCTTGAGTT
GGGACTTATAGATAAGAAATGTAAATAAAAAGGAACAAACACTCCCACCGTGATGCACAAATATTGGATCATGTATGTG
TGTGACAAGTGTGGCCGTCTGTAGTGGAGGGTCCAGGTAATAATTTAGGCCATGAAAGCCTTGGTCTGTCAAATAATAC
ATTTTGTACATTAAGTTAGTAGACAGCCATTAATGGTTTTTAAAAACAGATGGTCAATAGCAATGTTTGGACAAAAGC
AATTTTTAAGGAAGATTTTGTTTTTATAAAAAGTTGAATTATTGATAGCAGTGAGACCCAGAATAGAATAAGAGACCT
GCCTCATGTAAGTGAGAGTAATTCAATTCAGCAGTAATCTTGAAATTTGTAACCTCTGTGGTGAGAAATTGTATCCTG
GGATGTTGGGTAAAGCCACTGTGAAGCCAAAGAAATTAGTGGCTAAACGTAGAGAAATTAAGATGAAGGAACTGGCACA
TGGAGCCACTGTGTACTATAAAGTATTTTTATTGGTATTTAGTCTTGCTGTTATTGTTGCTAATGATTGTATTGAATAA
TTACCAGCTGTGTTAGTTATTTGAAATTAGGTGCCTAAAGCAACCTCTCATCTTGCAAGAAAGTCATCTTTCTTGAAC
TTTTTAAAACTTGCTTGAACATGGAGACTTGAATGGGACGCTCATCATAGTAGCACATCTGAAATCCTTCTCATTC
CTGCTGTCAATTTCTGTCCTTTTCGCAGTCCACTTTGTCCACCCCCACCATTCTTGTCTGCTGCAATCCAGCTTTC
CAGTCACTTTCTCTACTTCTTGCCCTGGCTGCAGCGTCATCAATTTAAACAGCTCTGGGTTGGTATCTCCTTTCACCAGAA
TTCTTGCAAGCCGTGGAGTACGTGCAGAGCATCTTCTTTTGACCCCTCTTAAATGCTGAGGGGTGTTTCCGACACACAT
TGCTTTGTAATTCAATAATAGGGCAGTTGTGGGTTCTTTTTATTGCAGTTATGCTGATTTTTTAAAGCACTCTGAGTAA
GAAAGGAAAGGTAGTAAATATACGTGTACCTCGATGCTCATTGATCACGTTTGACATGTTCTTGCCAAATGTTGTTT
TTAAACCTGTCTCTGCAGGTCGAGCTGTGAAGTTTGGGAAATCAGGGTCAGAAGGCAAAAAAATTGTTTGTATC
ATCGTCATACAATATAAATTACATGTAGCATATACATGAAACAATCCAAGGGATGAGCTTCTGGAATCATTCTCT
CTTGTTTACTCTGATTATATAATGGGGAATTGTATGCTTTTATACAATTTTAAATTTCTGAATATATGTGCTCAAAAAC
ATTATAATGTGGTTTCACTACTATATATGCTGAAAACAGGTTGCTAATGAATTTGGACAAAGATTTCCATTTTATTTCT
GTACGTTTACACATTTTTTGGCTGTATATTATATTACTATATATATTATTAGGACTACAGCAACCGTAATTCATCG
ACTGAGATAAGAAATGTGTTTTCCATTAATAATTATAAATCTGCCAGAAGATTGTGAGATTTACATTTGTTGGGGATCTA
AACAAACCAAAATCATTGCAAAGTTATTTTTAAACCTATTATTAATTATTTATGTAATCATAGATTATGGCTTGCAAGA
CTGAAGAAATTTGTTCAACAAACCATGTAGGTTTTGTGGAAGAGCAGTAGACTTTGATAAGTAAGCTCAGAGTGGTCCAT
TAACCTTTTCTCTATATGTACATTATGTGTTGATAAGCATGATATCTATTATACCTCAATTATTAATAACAATATACAT
CCTAACTATTAAGAACTTAGCCTGCAACCCTAATAGTGTCCCTTTCTTCTAGAACATAGATCAGCATAAGGAAGGAAG
CAAAGGAGGTCTCTAAGCACTCAAAATAGATGTTCAAAATGTTCACTCACTGAAGATAATGTAGGTCATTAGCCAGAGA
AATGTATGTTTCATATTTTAGTGATGATTCATACAAGCTTGGTCAATGTGGTTCTAAACCTTCTATAATTGGATGAAGCAA
ATTAAGAAAGGCTGGGTAGGAGATTTTCAGGGAAAGTCACAACTGATATTAGCCAAATGTCAGCTGATGGCTGAAAACA
ACAACAGAAAAAGAAATCTACAAAATCATTGAAAACCAAGACATAGCTATTTGGGGCCTTTTGAAGGGGCAATA
AGCTCAACCCATCTTTGAAAACACTGAGCGCATCTGTCTGGACAACTGAGTATAATTTTGGTGTTCAAACCTGATGAC
CCAAATCATCAAAAAATACAAAATTATTTTGTCTCAATCTGTATTGCTCTTCTATATTATGGTAAAGATTTCTGTTTA
GTGCACTTAAAGTAAGACTACCCCCAAATTTAATCCCCATCCCCCTCAATGTCTCCTCCTGGACATTGCTCCATCTAT
CGCCCCCTTCTCCTCTTTGACCTACTCTTTGATGGCTGCATCTCCTTCAAACTGGTTGAGTTTCTTAAGGAAAA
AATTCCCTTCTCTTTGATCTTCCATCAGTATATTACCACATCTCTATTGATTTTTCGACCCAACTTCTA
GAAAGTTTACACTTATCATTTTTCTTTTTCTTTCCCCCCTTATTTCTTACCCCTTGAAGTTAGCTTGACGCCCCA
CCACTCTGTTGCAACTACTGCTGTAGTTTCTCTGCTCTCCCAATTGCCAAACCAAGTAGATATTTTTCAGTTTCAATTTCT
CATCAAGTTTCTCTAAGTCAATTGCCAGTGATCCCTCTCAAAAACCTTTCCATCTTTGCAATGAGGTCGTACACTCTTT
CTTTTCTTTTCCCCCACCCTTCTTTGACCTGGGGTTCCAGGATCCCATTCTCCATCTCTGCTTTTCTCACTCTGTG
TGTCTTCCAAGACTGACTTGTGCATTCTTATTTTAATTACCACCTGTTTGTGCTGAAAGCCCCTAATTTTATATAGAAATC
CATCTTAACTCTTCTGCAAGCTTGAACCCCAATATTTATTGGAATTTCCCACTGAGTATCCCATGGGTTTATAAA
ATTCTTCATATCCAAACCAAAATTTAGCTTTTCTCTAAATTTGTGCTCTTATATATCTCAGTTGGTGACACTACCC
AGCTATCATGTTTCAAGAAATAAAATAAAAATACGTATAAAAGCATCAAACTCTATAAAATTTATCCATGTAAGGATTG
CCACCATTAAATATATACTTTAAATCCTTCCAAATGTTGTATACTTGTATATATTTAAAGGGATCATATTTGGTGACTT
ACTGCTATAACACATTTTTTCCATTTAACAAAAAATTTTCTGCATCAAAGTATACTTCAAAATTAATTTTGTAG
TTGCTCATGTTCTAGCAGTTATTTAACTAATAATGTTAAACATTTACATCATCTTTGCAACTTTATTTCTCTGTGTGCT
TTTTTCTTAAGAAATGACTATTGAAAATGACCCCCAAAAGGGTATATAATATCAGTGATAAAAATTAGCTCTTGGAAAG
GGAGGAGAGAATTTTCTAGTGTATGGTAGTAGCAGTAACAGTGGCCTAGTTACACTCAATATCTCAATATGTAATGCCA
TTTATGGACAGCTTACTATGTGCCACACTCTTTAAGGACTTTGCATAATCTCACCACAAATCTGTGAGATTGGATACA
TTATTGTTCTTATTTCATAGTTGTGGAACTGAGGCCCCGAGGAGTGAAATACTAGGCCAGGGTCACACAAGTAGTAAG
AAACAGAGCCAGGAGTCCACCTTTGGCAGTCTGTTTCCAAGATTGGTCACTAACACAATGCTTATCTGCCTTTTGTG

326/375

TACCCTAGGGCATCCTTTCTACCAGAGTGTAACCACTTCGCTTTATGTTTCTTAGAATAAAACCAATAAAATAGTGCAGTT
AGTTAGCTAAGTTTTTCAGAAATTTTGATAGATAGTGTCTAGAGAAACAAAAAGACACAATTTCTAAGATGTAGTAATG
AATGTTTCATTTCATGTCCGGTGATTATTTTGATTGTTGATGTGTTTTTGATAACAGAGTAGGCCAAAAACATACCATCA
ATTTAATAATGGAATCCTAAGTTTAGGTTTAACATGATTTTTGAAGAAGAATCAATGTGCAAATGTTGATGTATTTTCA
GAGTTATGGTTTCAGAAATGTGAATTATTCAAATCTCATATCAGAAATCTAAATTTTAAAGAAAGGAATAATAGAATATAG
TAGGTCCCCTACCATCAATTCTACTTCTGTACCCCTATTTTATCATTCATATTTGGCTTGCTAGTGAAGATGCCTTGTA
TCTGTTGTATCACTGGGTATAATGTCTGGCATTGTCAGGTGTGCATGCAAGGAAGGAAGGAAGGAGGAGGTTGGG
GAAGGAAGAGAACAAGGAGGGAAGAAGGGAAGGGTAGACACTTTGGGAGGCCAAGGCGGTTGGATCACCTGAGGTTGGG
AGTTTGAGACCAGCCTGACCAACATGGAGAAACCCCATCGCTACTAAAAATACAAAAATAGCCATGCGTGGTGGTCA
TGCCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCGCTTAAATCTGGGAGGCAGAGGTTGTGGTGAGCTGA
GATCGCGCCACTGCACTCCAGCCTGGGCAACAAGAGCGAACTCTGTCTCAAAAAAAAAAAAAAGAAAGAAAAAGGAAG
AGAAAAAGAAAAAGGAAGGGAAGGGTAGAAAGAAGAGAGGAAGGAAGGGAGGGAGGGTTGAATTATAGATTTCCCCAA
CTGCCCTCCCACACAATGTGCTCTAACATAAATCTTCATCTCAGTTGCTCAGGCCAAAGCTTGAGAATATCCCTGTGT
CTACTCTTTTTTAGAACATCTCGTATCTAATACATTAGAATCTCTGAAGCCTCTGCTCTCAAAATATACCAGAGCCCAG
CATCCTTGTCACCATCTCCATGGTTACCATCTATTGCAAGCCACCATCTTCTCTGGCTTGATGATTGCAGTGGCTGT
CTAATAGGAGACCCTGCATCTCCTCTTGCTGCATAACAGTCTATTCAAAGACAGCAGTCAGTGCAAATCATGTCATTC
CTCTGCTCATAACCTTGCAATGGCTCCCATTTCCTCAGAGTTAAAGTGATTATTGTGGCCCAACGTTGAGCCCAA
TTTGACCCCTGTTTCATCTCTGGTCTTCTTTTTAACTCTTCTTCTCTCATTCACTCAGCTCCAGCCCATTAGCCTCCT
TGCTGATCTTCAAGCACATCAGTCACACTTCCATTTTAAAGACCTTGGTGCTGCATGAAGTGCTCTTTCCCCCGGTATCT
TAGGGCCAATTCCATTGCTTTAAGTCTTTGCTTGTGTTTCATCTCCATTAGGCCATCCATGACCATCCCATTTTTTAAA
TGCATCGCACATTAATACCATTCCCAATGTCTGCTCTATTGTATGTATGAGTGCTTGTTCATAGCATGTCTATCCTTC
TAACACATAATTTACTATATCTATTGTTTATTATCTCTCTCTGTACTAGACTGGAACTACCATGTGGAACAATCTTC
GCCTATTTTGTCTACTGATACAGATATATATACACAACAGTGCCCTCAGCCATGCTAGGTTGCTCAGTACATTCTTGAAT
AAATGAATTATCGATCTACTCAGTTCTGTACACAGATGATTGGCTTCTTGGTTTCCATTAAAGAGCCTTGTTTCT
TTGCCAAATAATTGAAAGTTTCACTCAGAAGATAAGGAACATCAAAGACCTCAAGCTTTTGGTCTTGGAAGCTGTGG
CTTTGGTCTCTGTCTCATTCCCCTTGGGATTTAGAATAGAAAAATGCAGGTGGAGAACACATTCAAACATCCCACACTT
TATCAGTATTTTAAAGAAAGAAAGTATGGCTTTTTTTTTCTCAAAACAATGTCTTAGTTATAAATGAATTTGTATAA
ATGGCCAGTTGTACATTAGGGCAGTTGCACAATAGAAAGCATCCAGGGAACAATCATAACCTCAAGAGCCTATTGGAAA
GTGGGATCCTAAATAGCTTTCTATGATCTCCCTAGAAAACGTAGAAATTTCCCAGAGAATAAGCCAGCATTTTGTGGA
CCATTCTGCAATTCAGGATCATGCTTGATAGTCTAGCTTGGAAAGGAGGCAAATTGAAACAAGTTGAAAATCTGCAG
GAACTATCCCAGTGAGACCACAGAAAAGCCAGAAGAAGAAAAGGTGGGATTGGGGTAGAGAACGAGCCACTTCTCAC
TAGTTTGATGAAGCATTTGAATATCCCAAGGGAGAAAACATTGAAGTTCTATGAGACACCAAGAAAAGTGTATAGATTA
TCACAGCATATGGATAGAGGTCAATTTGTTCCCTCCCTCCCTTTAAAGAAAAGTAGCTTTGCAAGCCACAGTTTAGGAAC
AAATGGACTTTTTTGACATAGTTCAAATCCTCCTGGGTGTGGAGGCATTGACAGGAGCAATGTCATAAATTGGTTAAAGG
TTGCAGTCTGGAATCAGGCTGCCCTGAATCCCAGCCCTGCCATTTACTAGCTGTGAGACCTTGTGCTTCCCTAACCTCAG
TTTTCTTTTCTTTTCTTTTGTAGACTGGGTCTAGCTCTGATGCCAGTCTGGGGTGTAGTGGCACCATCTCAGCTCAC
TGCAGCCTCTGCCCTCCGAGCTCAAGCGATCTTCCCACCTCTGCCCTCTCAAGTAGCTGGGACTACAGGCATGCACCACC
ATGCCCTGGCTAATTTTTGTATCTTTTGTAAAGATCGGGTCTCGCCATGACACTTAGGCTAGTCTCAAACCTCCTAGGCTC
AAGTGATCCACCTGCTTCAGCCTCCCAAAATGCTGGGATTACAGGCATGAGCCACGGTGCTCAACTAACCTCAGTTTTC
ATAATGGTAAAAATAGGAATACCGATAGCACCTCCCTTGGTATAAGGATTAAATAAGATAATCTACATAGTGCTTGAAC
AATGCCTAGGCAGTGTTCTCATCAACAGTTAGCTGTGTGCTGTGTACATGCTGGAGCTGCTACCTGTAGAAATTTTAAAT
TTAAATGGTGTGTAGTTTGGAGGTTAGGAGTTACTATAGGGTACTCGCCTAGGGAAAGACAGTTGGTTACCCAGACAGGTC
CTTACAGAGTAGTGTTTTCCCTGGAGAATTAACATATAGTTCCAGAACTGTCTCCTCAACCAAGCAGTCTCAGAAAGGTGAT
CTTGTCACAGCCTCTGAGTAAGCTGATTCAAACCTCTCAAAAGCTCACAAGAGCCTTAAAGCCAGAGTATCAGCTGATTC
CTTAAAGCTACAAAGTGTTTTTGGCCTTGCCAACATACGCATTCTCCCTCTTATGGGTAGGTTTGAATAGCTAAATAGT
ACATAACATGGATTTAGAATAGACAGATTTACATATGATCAGAAGGCTCAGTGGTCATAGTTTTGAGGGCCTAGGACAT
GCATGTGAGCAGTAGGGAGATCATCACAGGAGGATGGGCACACTCTCGAGGCTCATAACAGGCGCTCCCTCTCTCCATGG
GCAGCACAAGGCAAGTCTCCTTTGTCTTTGATTACTTGCCAACACCCTCATTCTAATGGGAACCTTTCTTTTTCCAAA
TATGTTAACACCTTCAAGTAATTACTGTACGCTCCAGCCTGGGAGTCTCTTGGACACAGTTTTTCACTAATCTAGATG
GATCTCATAATTTGCCCCGAAAGATGGTAAATAATTTTACTTCTCTTACTTCTGACTCTAAGGGGGATACTTCACTC
TTGCTCCTTGACCTCTCCTCTCTAGATCCCAAGCCAAAAATGTTGGAAAGGATTAATATGAGCTGGGCCCAATAGG
CTACAGCATGCACCAGCCCCCTAAAGCCAGCTTTAGGATTGGGCGGAGTGTACAGCCAGCTTCCACCCCACTTGCTTAT
TCAGCGACCTCCTGCAATTGTCTCTGCTAGCCCTTGGCAGATCAGAAATGTTCTAAAGATTGACCTCTATTACTTTGG
GCTTTCTTAACCTTGGCATCCATGAAAAGATCCACTTAAATGCTCCAGATTCAGTGAAGTCTCCTTATCAGAGCTTCTT
ATAGCACCCATACTTTTCTTTCTCAGCATTTATTATGAATGTAATCAAATCATACTTTGTGCATGTTTTGTTGTGGTTG
CTGTTTAAATGACTATTTTGTCCATGAAAGAAGGAAGTGTGTTTGTATCACTGGTTTATCCAAGGGACTAGAACAAAT
GTATGGCACATACAGGATTTAACGAATTTTTTTTTAATGATTAATGCCCTTTAGATAGTGTTTTTCACTGAGTGCCCTC
AACTTCTATGTGCATTATGAACTGATATAGTGGGTCAACACTATCAGTAAGAAAAAAGAACTGGAATAGAGTAGAAA
AAGATGAGAATGTATCAGCATAGGGAATAACTTTTATAAATCTGTTTTCAGTATGGATAGGCAGGCCTACACCACACAC
ACACACACACACACACACACACACACACACACACATGAGTTCCTATGAATTTGTTTTTTTTTAATTTCTTTCT

327/375

TTTTTTTTTTTGGAGAAGGAATCTCACTCTGTCAACCCAGGCTGGAGTGCAGTGGTGCGATCTCCACTCACTACTGCAACC
TCTGCCTCCCTGGTTCAAGTGATTCTCCTGCCTCAGACTCCCAGTAGCTGAGATTACAGGCACCTGCCACCATGCGCTG
GCTAATTTTTTGTGCTGTTGTATTTTTTAGTAGAGATGGGGTTTTTGCCATGTTGGCCAGGCTGGTCTAGAACTCCTGAC
CTCAAGTGATCGGCCCGCCTTGCCTCTCAAAATGCTGGGACTACGGGCGTGAGCCACCGCACCTGGCCAATATTTTTTT
AAGGTAAGAATTTTTGAGAAACACTGTCTAGGTTCCCTCTAAACCCGAAGATATCACCTATGTTTCAGCCTTTTAGCCC
TAATCCTTTTTCTTAATCTTCCCTATGACCAAATATTACCATGCACACATGCACACATATGTTGTCACATATG
ACATGTACACTAATCCATCTAAAGTGCTACTGTTAAGGAGGAGCAATAGAAGAGGTGATTTCAGGGAATGGTTTTTGATG
GTTATTTACTTTTTATAATAGTTTTTATTTGTAAAAAGAAGAAACCTAGAGTTTTGTATCCTAAACAAAATTTAGGATTA
GGATACAAAATAATAAAATTCAAAATAAGTCTTGACTAGTGAGTGTAGAAGGACAGTGCTACATCTGAATCTCCAGTTG
GGTTTACGCATTTTTGTATTTATCAAAGGCAGTAGTGATTTAAAATGTTGATAAACTCAGTTTCAGTTTTCTATTGC
TGCAACAAACTATTCCAGAAAGTGATGTCTTGAAACACAACCATTTCTATTTTGAGTCTGTGCTGGGCTCAGCCGGGC
AGTCCTGCTGGTCTTACCCATGGTCCCCAATATGGCTGCAGTCACTCCAGTAGACTGGAGGCTGGGCTTAGCTGAGATG
ACCTGCTTTCTTTCTTTCTTCATGTAGTCTCATGGCTTTTCTCTCTCTCCATGTGGATTCTCATGTGAACTCTCCAGC
AAGGTAGTCAGAATTTCTTCCCTGGCAACTCAGGGCTGCCAAGAACACAAAGCCAGGCTTTCTTAATGTTTAAAGCCCA
GAACTGGCATGTGGCCAATTTTTTGTGTTCTGTTGGTTAAAGCAAACCGAGTCAAGAAGAGCCTACACAAGTAGTAATA
TTACAAGTATGATGAAATATCATTCTCTTCTTAGACCAAACAGCATATTTCTCCCTCCACTCTTACCCTCTATAATGTT
TTGCTTTTGGGAGTTCTTTATATGAAATGCCTCCCTCTACTTCTCTCTTCTACTGAAATCCTACTCATCTGAATCCA
GCTCAGAGCTAATCAGTGATTTCTTTCATACATCTCTATTATCTCATCTCGGAAATAATCACTCCTGCCAGGTGCAGT
GGCTCATGCCGTGAATCCCGAGCACTTTGGGAGGCTGAGACAGGCAGATCACTGAAGGTTGGGAGTTTCGAGACCAGCCTG
GCCAACATGATGAAACCCCGTCTCTACTAAAAATGCAAAATTAGCCAGACATGGTGGTGAATGCCTGTAATCTTAGTT
ACTTGGCAGGCTGAGGCAGGAGAATCACTTGCACCTGGGAGGCGGATGTTGCGAGCCAAGATCGTGCCACTGCACTCCA
GCCTGGATGACAGAGCAAGACTCCAGCTCAAACAAAAAAGAAAAAAGAAAAAAGAAAAATGCCCTCAGCACTCTCATA
GCATTATGCTATATTTTATATTATGTCTTGACATATAACTTTACACACACACACAAGCACACACACACAGATGTAG
CTTGCTTTTAGATTTTAAAGTTGCTTATCTAAGATTGGGTGATCAATAACTGTTTTTTTCAAAAAACATTAAGTGGTTTT
CTATGACTTTTAAATGACAGCTCTAAATAATTATAATTTCTCACTAGTTTAAAAAGGCAGGTGGTGGGATATTCAAAC
TATTGGAGAAAAAAGCTGATGTATGCTACCAGCATAAAACAACAATTGCCCTTTACATCTTCAGAAACCCCTGACTG
TGCAGTCATTTTCAAACCTGGATTTTTTGTCTTGTGTTTTTCCAAAGTAGTATATATTTAACTTTGTAAAATGGTGTGG
TGTTTTTTGGTTGTTGTTGTTTTTGAGATGGAGTTTCATCTTGTACCCAGGCTGGAGTGCAATGGCGCGATCTCAGC
TCACCGCAAACCTCCGCTCCCGGTTCAAGCGATTCTCCTTCCCTCAGCCTCCTGAGTAGCTGGGATTACAGTCATGCGC
CACACGCCCCGGCTGATTTTGCATTTTGTAGCAGAGGCAGGTTTTACCATGTTGGTCAGGCTGGTCTTGAACCTCCTGAC
CTCATGATCCAACCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAAGCATGAGTCACCACGCCCCGGCCTAACATGGTGGT
TTTTTTCCTACCTAATATGAAGATACTTAATGTCTTACCTTGGAAAAATATACATTTCAACCAGTTTATATTTTACAGA
AGTGACTGAGAAATCATAAGCCTTTGTGCAATAACATCATCAGTCAAACACATAAGCAGATTCTAATCTGCCCTCTCTA
TCAATTAGTCTTAAACCTACAAGTTGTTCTCTATACCAGCTACACATGTGCATTGGTAGTCTTAAATTGTGATATGAG
CCCTTAGGTAGTTTACACCTTTTCCAAAGGAAGCTCAGTGAACTTCTTGAACTGTGTAAAGAAATTGTGTGTGAGTATG
TGCATGTACATTATCTGTATTTTTCTGGGTGGATGATCCAGTATCCTCATCAGAGTCTTAAAGTTTGAGAAACCCAATTA
TATATTAGTTGTAAATCTGTTTACTTTCTTAGAATTCTTCTCACATTAAACTAAGATTATATTTCTATTTTCATAGGTA
ACCAATTTCTTCTGGAGCAACTGGACACTTACACGAACACTTCCATCTGTCTTTTCATCTTTACATTTTATTTCTAGGTA
TTACTAGTGTAGGTACACTCCCTCCTATGGGGAGATTCTCTATCACATCTCTAGAACTTCCACCAATGCAAGCCTTCT
TAAATTGACCCACTCGCTACTGAGTCTGACCCCTGGGCCAGTCACATCGGTGCTTGTAGAAATCAGAATCTTGGAACT
AAATCAGAATCTGCAATTTAACAAGATTTCTAGGAGTTTCCACAGCATATTTAAAGCTTAAAGACACAAAGCTGGTGC
ATCTAATACCCCACTTTCTGCTTTTAAATCTTTGAGGATTTATGTTTTTAAATCTTTATAACTATTAACTAATTA
TTTGATTTCTATTTTTCATATCATCTGACAGTTTTGATTAAATCCTTTAACTCAGGATTTGTAAGGGGTGAGTG
GGTTAACTAACTGATCTGATTATCAAATAATGCTACCATTACAGGACTTATGCATAGTTTCTGTGATTCTCAATAGAAAT
TGATGGTACCTACAACCTCTACTCCTTGTGTTTGTAGTGTCTATGTTTTTCCACTGTGCTTAAAAACATTTAAAGGGAGAG
CTGGAAAATTTATTTTAAAGATGAATACTATAAATGAAATAACTAAGATTAGAAAAGGCAATGATAATACTGAATTACATT
GGAAAAATTCAGTTTACAAAACCTCTGAAAAGTTCCTAAGGCAGAATTTTGTGCCCCGGTTTTCTCATAATAGACCCAGC
AGTTCTAAGTTAAGCACACATCTTTTGGCTATATGGTGTATATACCAGACTATCCTTTTTCTCCAAAATTTGACTTTC
ATCTCAAAGAGTTTAAAGGAATTTGTGACTTGGTGCGTTTGTATGTGGCACAGTTCACATGTGAGGGATGGTGAATTTGGA
TAGCACGACAGAAGTACGTGCCAAGAATAATTGGCTTCTGTCTTGCAGAACAGCTCAAATACTATGTGTATCAGATAT
GTAATTTGGGTGTACAAAATGCCTGTAGTTCAAAGTGCTTACTCCTCTGCAGTGGCAAGCTGAGCTTCTGTTGGCTG
ATTCTTATGTTTGCAGTAAACAGGCTGGGTGCAGTTAGAAAGAAAGCATCCATCTAGTAAGTGCATTACATCATCCT
TCAAATGCCATAGGCCTTAGCTCCAGGACATTTTCTGCCTGTCTCCTTCCCTCCCTCCTTTCTTTCTTTCTCTCTCC
TTCCCTCTTTCTTTGTTCTTTCTTTCTCCCTCCCTCCCTCTCTTTCTTCTTCTAGTTCCCTCTTTCTTTCTTTCTTT
CTATTGAATAAAACGCAAAGTAATCTTTTTCTACTTACTTTGATTCTTATCAGCTTTCTTAAAGCAGTTTCTTTGCCGC
TGTTGTGAATTACATGGGGCTGTGGTAAAATGTGGCACATTTCAAGGCTATGTATCCCTTTAGATTCTGGTTTCAGTAAG
CTTGGAATAAATAGGAGAGCTTACGCTTTTAACTACTAGCCTGCGATTTCGTATAATCATGTTAGTTTGGAGAAACACTA
CAGTAATCACACATGTAAGGGCTTTGGAGTAAGATGGACCTTGGTTATCCAACGCTTACTGTGTGACTTTGGTAAATTA
CCTAACTTTTCTAGCCTGGATTTAATGTGTAAAGATAGATAATACTAACTCAGTAATCTTTATGGGTTCATGA
GACAATGTATTTAAAGCACCCAGCATACTATCTGGTTCATAGTTTACAGTCAATAAATGTTAATTCATTATTTGATCA

328/375

CAATGTAAGACTATTGAGGTTTAAATTTTGATTGTTTTTTTCAAAGTTTGTAACTCTGTTAGGAACAATTTCTAAAGTAAA
 ATTCAGAAAACAAAACCATCAAAATTTAATTCAGCTAACATTTTTGAGGTTCTATATAGTCTCGAACATATATTATCTA
 ATTCGATTATCACTATAAACCTGTGTATAGTAGATATTATCATTCCCATTAGTGGATATGCAAACCACGGCTGTGGGA
 TAGTTTTACATTTAGTAAGTGGCAGATCCAAGTCTAGACAGCCCAGGCTGGTCTCTTTATACTCTGCCTGGCAACATT
 TGCCTTCATCACTGTCTGTTTTCAAAGTAACTAACCTCTACATCCCTGCTCACACATACAAATAGCTCTAAAGGTACA
 AAATAAAGCTAATTTTCTGAGCAATTCATTTTATTCAAATCAGTCTAATGATCTGTTCCATGAAAAATGATTATGTAGC
 TCAAAGGTCTTCAAACCTCGTCTCAAACCAGGGGTGAGCAGATCATATTCACATAAAGGGAGAAGCTTGGCCAGCCAGAA
 GTCAATAAAGATTCTGGGACTGGGGTGACCTGGAAGCTACAACCTGTTTAAAGGAGACAGCTTCTGCCTAGCTCCAGG
 CTAGTGCTCAAGTGCCAGGATGTGGGCTCCCTATTGTCAAATCTTTTTTTTTTTTGGCTTTTTTAAAGACTGGAAGAAATC
 CAATATTTAATGCGAACTTCCCATTTTTGAACAACGTGTGTGGGCCAAAACAAGTCACATCTGTGGACCAGATCTGGCC
 TGAGGATTGCCAGTTTGCAATCTTGACCTAATTGCCCTTAATTTCTTCACTTCTCTTGACCTGGTAAATACTCCATTTAA
 ATGAGTATTAGGTATGTTCTGGGCCCTTTTGGACTGGGTCTTTGTAATATATACAAATTTCAAAGACTGACCTTTAGTT
 TTTCAAGTTTCAAGATTGATTTTCTCAGAACCAATTAGATCAGGTGCTGTCACTGACACTCAGAACTCATGAACTTTAT
 GCAAGAGCAAGAACATGAATTAGGGAATTCACAGTGAGAAATATATTGACAAGTAGACAGGATACCATATTGGCCAGAT
 CAGTTCACTTGTCTGTAGTTTACAGCCCTTGAGAAACAAACTTCTAATTAGAAGCTGCTTTGACATATATGGAGTCA
 GAACTAGGAACGTGATAGCTTTAAAGGGCTTTCCCTGTCATTTGGGTTTTGAGATTCTTCTCTCTTTTATGGTAGTCTTAAC
 ATTCGGCTGTTAAGTGTTATGCTCCCCCTCCCGAGCATGCCAAGTATATACTGACCAAGTGCTCTTCTTTATTAGCTA
 CCATATGAGTGGTTCTCAAACCCATGCCCTTGTTAAACACAGATTACAGAGCCCTATGCCCCCAAAATCTGATTTCAG
 TACTTCTGGGGTGGGTCTGAGAATTTCTTCTTATAAGTTCCCAAGTGATGCTGATGCTGATGAATGCTGGATGGG
 GAACCCCTTTGAGAAGCACTGGGTCTCTATCATCTTCAGCTGACAGGCTTTTTTCCCTTTGAAGGGTTACCGCTAT
 TGTCTGTCTCTGCTTTAATATGCTAATATAGCATTATGGTCATATCCAGATCCTGAGGTTGGAACCTGGGTCTTAGA
 ACAATTTTTAAATTTGTTTATATTTTTTAAAGGTATTTGATTTATTAATACTATTTGATTACTTTATTTTCATCAAGTCCAA
 GGTGCCATTGATTATAAAAACATGTCTGGATTTTAGAGGCATTAAAAATGTAGGGGCCAGGCGCGATGGCTCATGCCTG
 TAACCCAGCACTTTGGGAGGCCGAGGCGTGCAGATCACCTGAGGTGCGGAGTTTGAGACCAGCCTGACCAACATGGAG
 AAACCCATCTCTACTAAAAATAAAAAATTAGCCAGGAGTAGTGGCACATGCCTGTAATCCCAGCTACTTGGGAGGCTG
 AGGCAGGAGAAATCGCTTGAACCCAAGAGGCGGAGGTTGTGGTAAGCCGAGATCATACCATTGCACTCCAGCCTGGGCAA
 CAAGAGCAAAAGTCTGTCTCAAAAAAAAAAAAAAAAAAAAAAGTAGGGAAAAAATTAACAGTTTCAGAGGTACTGCAA
 ATTAGTAAATAAAGCCTCAGTTTGGGGCAGTCTCCCCTGGATTATGTTGTATGTGTGTAGCTCAACTCGATGGGCACAG
 TTGAAGGAAGGATTCCTGTTGTTGTTAAACAAACATAAGGTGAATTTTAAAGCCTCCCTTCCCCAATTCTTAGTGG
 AAAAGACACTACTGGTACTGTGTCTATGGCTGACTTTGTCTGCTAATTGAAATATCTTATTATTGTATGCATCCTCTC
 CTACTTAAATGTGACCCGAAATGCCAGATCTTCTCTTGGAAATGAATCTTTTTTGTCTTATTGGACTGGTAGGGCTAT
 GCACTTAAAAAAGTTGATTATTAGACTCACTGTTTCTTGGCCAGTCAGGAAAAGATATTTAGGACAAGAG
 TTTCTCAATTGTCCTCATCCAGTTTGGCCTTTATAGTGAATTTCAATAAATATTACCATGCCTATGTAAGAGGGTGACT
 GGAGAGGCAGAAATCTATCTGACTGTCCACTTCTAATCTACTATTGGAAAACCTGCTAGGGCTTTTGTATTTATTA
 TTTTGGAAAAATCATTAAAGTGGATTCCCTTAGCTATATAAACATAAGGCCTGTCTCTTTTGGGAGAAAGAGTG
 TGACAAAATTTCCCCCTCTTATTTAAAGCTACCCCTCCTCTTGGTACAGTTTGAGGATAGCGTGGACCAAACATACCTA
 AGAATTCAGGAGTCTACCAGGAGAAAAGAGACTTTCTCACTTTGTCCACAATTAGAAGTACTGAGGAACCCATGAGA
 ATGGATGAAAAAGGGCAGTCCCATGGTGTATTGTGCGGAGAGAATGCTGATACGGCGGGCCCTAGAGGGATTAATGTAT
 CTGTGTAGAGGAAGGGGAAACCTAAGCTGCCCTGCTCAAGAAGAGCATCTTAGATTGTTGAGTGAGGGCTGATCTTTACT
 AAATGAGTTAAATCAAAGAGCCGAACCTTTGGAGTCCAAGGCTGGGCATGGAGACCCAAACCAGCAAGGACACAGGTCT
 GGACAGGACCATTTGTTCACTGTGATACCACATGGCAGTGGCAGAAGCCTTCATACCAATTGCCGTCCTCTCTACACCTG
 AAGTTTAGAAGCACGACTCTGCTTTAGACTGAATAATCCCTGAGGTTCTTGGGTTATTTGAAAGAGGGGTAGTTTTCAA
 AAAGAGAGATATTAGATTTCCCTATTGAAAGGGCAGCCCTGGTCTCCAGTGATTAACTGGAAAAACAAAAGAGATATAAC
 AATTTTTACATCTAAGTACTGTGCTAGCTTCTGTGGATCTAGAATCAAATGAGACAAGATGTAGTATGACAAGCAGTTA
 GACTCTCAAGAAAATCATTCAGTCTGTTTAGGAAAACCTGACATTCAATTCATTTCAGCAAACCTATTGAGTAGCTCCTGTG
 CATCAGAACCTGTATTACAGTCAACTGAAATAAACACAATTTCTACACGAGTGGAGTTTTCCAAATAGACTAAGATGT
 CATAATGGAAGTGTGTGTAGAGTAATGTTCAAGTTTTTTTTTGTGTTAAGCTTCCCCATCCCCCAGAAAAACTGGATATAT
 ATAGCAAAACCTTTTCATGGATAATAATTGACATATACCTTGGAGGCCATTTGGAATCTCCATAAACGAAAGAAAGG
 GCATTTTCAGACAAAGGGAACTACATGTACAAAGTCACAGGCATGTAGAAAAAGATGAATGTTTTCGGAGTAACCTTACAGT
 ATGTAGGGCGCAACAGAGGAAACGCAAGGAATAAGACTATGTGAGAAAGCAAGTTAGGGCGACCTTATTAATAAAGTT
 TATAGACAGTGGCGCAGGCCAAAGATGTAGAAATGTGGCTTGCTGTGTTCTGTATTTTGGAGCAATCACTCGGGTACC
 CTGTGTTGTGAGTAGGGGTGAAAAGAGAGAAATCAGTGAACCATGGGAAGCAGTTTGGGAGATAGGTTGGAAAAATATT
 GGAATGTTCTAAGCATGACATTGTGAAAAGATGCTAGAATCTTTTTCATATGAGGGGTGTTATGGAAAAATAAGAAAGT
 ATTGGCCCTGCCCTCAAGAAGCTTGGAAACATAAAAAAGTAAAAACATGAGAGCAGGGCTTAATAATGTATCTCAAAGTG
 CTGAAGGAAGCATATGCATTATAGAAGTTCTCATCTTGGACTGTGGTTTGTGAGAAATGCAGCTGGGTGGAGTCTGAGG
 AAGTAAGTGATGGCCATAATCGAAGAAGAGATAAGAGGTAAGAGCAATGGCTTAAAAAGCAAAAAAGCCTCAAAACATTC
 AAACCTTCTTTGTATAATAGTGGATGTTATTTTGAAGATGTCAGTTTCAGGAGATACCATTAATCATGTGTTTGTCTGTA
 TTTAAAAAGCCACCACCATAAAGATCTAGAGTCACTCATGAAGTTCAAGTACCAATTTTTTACCCATGAGTGTGGAACA
 TTCTGCTCTTTTACAAACAGTAACCTCGTACTGTCAATTTTGGCGCGCATCTCTCATTTTGTGGTTATTTAGTGGCCA
 TGTAACATGTACATGACTTGTGGTGAATATGGTGATTCTCACTTTATAACCAAGAGGGTGGATGTTACAGCATATGA

329/375

GCAGTTATGACTGTAAAGCCTGAAGTGTGAGTCACAGGGCTGACCCAGGTAGTAAGATGTGTTATTTGTTTCATGTTGG
TTAGCTGAATTTCTGGGCTGACCTCACTGAAGTTTGTCTCCAGTAAAGAACCGGATCTTTACTGATAGATCAAGGATCT
GAATTCGACCTAGTTCTTTGGCTAACCAGTTGTGTCTTTGGGGGAAATTTCTTAATCTTTCTGCTCTCCATTTCCC
TTTCTGTAAGTAAGGGATTAGACCAAATTCATCCAGGATTGAGAAAATCTATGGTGTGACAAAGACTGCTGGTGTCTGA
CTGAATATCCTTACAGATTTGTTTCATTTAGTAACCAATATAATAAAGATGACTGACTGAATCTTAATTATATTGGGTGA
CATCTGCCCTAGTCAAAAGATTGCATTTCTCAGGCTTTCTAAGAGATTGATGCAGCCAACTACATGTTAGCAGAGGGAGC
TCCTGCCTAGAAGCACTCACTTTTACTCCTCCTCCGTTTGTGTAGTAGTGAATTTGGTGTCTGGTGTCTGGCTGGAGCATC
AGTAGCCATCTTGTAACCTAAATGGCAGAATTGAGAATGGAAGCCATGTGTTACGGATGGTGGATCAGAAAAGATAATAG
GAACCTAGGTCCCTGATAAACATGGTGTCAACATTCCAACCTTGACCTGTTTCTAGATTATTTTCTTTACTTTTCTTTT
TCCTTTCTCTTT
CTTACTGCAGCCTTAGCCTCCTGCACTCAAGCAATTCTCCCACTTCAGCCTCACGAGTAGCTGGAACCAACAGGTGCATG
CCACCATACCCAGCAATTT
CTCATGTACTCAAGTGATCCTCTTGCTTGGCTTCCCAAAGTGCTGGGATTAAAGGCATGAGCCAAACATGCCAGGCTA
CATTTTCTTAATATGAGATAAAAATAAACCTCTTTCTTATTGAAGCCATTACTAGATGCCTAATTCATTTCTAACTAA
CATATTAGCATCAGATTATCTTTATGTAATTTCCATTGCTAGGTTTTCTCTTTGCAGTATTGGAGACAATAGCTTACCA
ACTAGCTTGGGAACCTCTTAGTGCTATTAGAGTTTCAACACAATTTACCAAATTTCTAAAATTATTTAGTTATTGGATA
TATGAAAACATAATCACCATATGTGAAGAAAAAACCAATGTTTAGTACAAAAATTGGGAGGGGGGAATATTATATTA
GAGAAAGTTTATTAATCCAGAAAACCACAGAATTTAAAAAATATTGGAAGTTGGGAATTTGGGAGTTAAAGGTACATTT
GATCTTTGGTTAATGGCAAGTTACATTTTATAATAGGATGTAAAACCTATTTCTCACTGCACCTGTACTTTGATCTT
CTTGTCTGTCATTTGCAATGTGATTAGGAGATTACGGGTCACTCTCAGCCTAAGATGTTTTTGTGACTTAATTTTCTA
GGAGAGGAAGGGGATCATTAAAGGATATCATTAAAGGAGAGACAAAGGCTTGAATTGACCTTCTTGAAAGTAGTC
CCATCTGGAAGATTTTATCAGTAACATTTATCAGTGTATTTGGCTTTTAAAGCAGACTCTTCTCCTCTTGTCTTTGAAA
CAAACAGGCAAGGCTAAAAAGGAACACGTTAGTGCTCAAAGTTTGGCTTTTGTGTCATGCTGAATGGGAAGAAAAATAA
TATTTAAGAAAAAGCTTTCTTCTAAGTTAATTACATGATTCTTTTTTTCAGTTTTGCTTCAATGTTTCTGTTTGGCCAAA
TTTTAATTGGCAAGTTATGGTGTCTTCAATGATTATGCCTTGGTGTGATTGCTTGGATGTGTGTTTGTGAGTGGAG
GGTAGAAGGGATGAGATTTTTGTGAAATACAGTGAGCAGGGGCTTAGAAAACCTACTGCAGTTCTCTGTGTGACTAAGC
CCAGCACTAGTCTGAACTTCGTATTGTACTTCTCTGGAATGCAATAACTATCGTCAGGAAGACAAACGTTGCTGTGGC
TTAAATAAAATAAAGTACATGATGATTACCAGTCAAAATAAATTACCCAAACAGTCTTGTAAGTTGTGTTTTTTGG
TCATCAGAACTGCCTCATTATTCATGTGTCTGTTTGTCTCTTTGGTTAGTTTTGCTTGTGACTTGCATGTATCAATGA
TCACAATCCTTGTCAATTTGCCAATTCATATAAACTTTAGAAAGTGAAAATTGCTTTTAAAGAAATTTATTTTGAAGTT
TCTACTTATATTTACCCACATAATGCCCTCCTGATAGCCAGCTTTGTTTCTTCCATTCTTTGAGAATACTCCCTAG
TGAATTTAAAGAGTAAATCTGATGTTGTGGATTATAATATTATACACCAATAAGTGGTTGTTACACACTTGTGTCCAC
ACTTGGTAAGATGTCTTGTGGATGTATCTCTTCTATGTATAGTATATTAATGGCTTTATCCGCCATTTAATGTGGTTC
CCATGAGGTTTAGGTAGACCATAGATACTGTTTCAATTAGAACACTTCATGAGGATTTAGTTTTCTCTGTCTATGGGTCC
TGATCTGAACCTCTCCATTTTATCTTTTGTGTTTTTTGTTTTGTTTTTCTCCCTGATGCCGTGATATCAGAAGAAT
CTCCATTTTGGCTTCATCTCTGCTCTATCCACATGAGACAGACCAATGTCTGCAATCTAGTGCCATACCTTTCCAGG
TTTTTATGTTCCAACAAAAAGAGAGCATCTTTCTAGTAGCTCCACATAATTAAGGGTATAGCCCCCTCTCCTGAA
CCAATCAGTCAATCAGTGGTCCCCTGACCATGAGGAGGTTCCCCAAAGGAAATCAGGGTGTATTTTTTCAAAGG
AAGAAGAAATAAATGCTGGACCTTCATAACAACCAATTTGCCACTAAAAGTGCAATGATATTTCTTGATGAAATAGAAC
CTCTCCTTGTATACTGGGCTCCATGACACATTGATCATGGTTAGCTAGAGATTCTGAAGTCTTATATCCACTTTGCC
AGTTACATTTATTTGTAGCTCAAGGGGACTGTTAAGGGAAAGGGGAGCAGTGCTAAAAACAAATCCCATTTCCAATATTA
TAAAAAAACCATTGCTCTGCCCTTCTTTTATTCACAACTTAGTTCCTCATCTCTCATCTTCCCCAGCTCTCCTTTTCA
GCTATTTCTCTGTAGGTGCCCCCTACCACTAACTCCACAGATTCCCCCATCTCTTTGAGAAAAAAGCTAGATGCTC
CCACTCCCTTTATTTCTTCCACAGTAACAGCTTAACTAGCACACGGCTTTGTACATGGTACACAGTTAAGTAATATTT
GTGAAATAAATACGGAACACTTAAGGGAATAAAAAAGCAATCTATCCTCATCAAGAATGAGCTGAGAATCCCTGAGATA
GCCTATTTAGCAGCTTAGCCTGAATTTCTGTTTTAGTTTCTGTTTCTGGAACCTCTTCTTATTTTAAAGAAAGATGATTC
TTATAATTTATTTTATATTTGTTGATATTATCCAGTCTTAGCCAGTTATCAAAATGGTCTTGAGAATTAGGAGGGGAAAG
CATAATGTTATAAACATTTTTCAGCATATTGTGCAAGTAAAGTCTGCTAGTCTGGGTAATTCTAGAATCAGAGTAGACTT
GAAGTGATATCAGAGGAAAGCTATTACCCAAGTTTACTGCTTGCTAATCAGGCAGCCAGCAATAATGAGATGGTACAAT
AGAAATGTTCAAAGTAAGGTTTCTTGGCATAACATAGCTATTTAATTATTTTATTTCTGAAAGAACTATAGCTCCACTGT
TACCTAAGTTTAACTTTTAGGCATTTAATATAATAGTATCTCTAGTGTAACAGAGGGAATCAATTACTATGATAAACCA
TATCCTTTGTAAAAGAACTATAATACCAAGAAAGGCTTTTGTCTTCATCTTTTTTAGTTTTTGGTTATTTTTTGTTC
ATTCCCTTTAGGTAAGAATAAGCATCTAGAATGCCTCATTATGAGATTGTTAATGAATATTTTCCATTGTAATTTAATA
AGCCTAAAAATAAGAAGTACTCTCTACTTTGTACATAAAGATCGTTGAATGGTGGGTCAATTAGTTGATAGCAAAAAAG
TCACTCAATCTTATGTTTCTGATGACTTGAAAAATTGAGTGGCAGTATACAAAGTCTGAGCAAACTGACTTCAG
AATGAGTATTTGGCTTTGATTTCTCATGGCATCTTGCCCACTTGAGCCATCTTTTTCAGAGGTCTCAGCTGTATGAAAAA
TAGTACTTTTTTTTTTTTCCAGAAACATGAAGTCTGGCACTTTTATAACTTTGTGCAGCTTGTGATTCCCGGATTCAAT
GGTGTAGTGAAAAAGAGTCTCAGGAGCTCAGAGCTCAGAGAATGACAAGAAGACCCCTAATCTTGCCTGTCTC
TATATTTAGTATCCAAGTTGGGGATAAAAGCTAGTTTTTAAAGATTTTCTGTTTCAAGAAATCTTTTCTATATACTATT
AGGCAGCCCTTTGTTTAAACCTTTTTTTTTTGTCTCAGGCATGGATTAACTGCAATTGGATTCTATGTTAAAAATGTATTTT

Fig. 6.32₄

330/375

TTTGAACATTTTGTAGGCATCACTCCAGTATTTTCTATTGGTGAAATCCTGATCTTTTTCTGTGTAGAAATTTTGTGA
CCTTCTTTTCTTTACTGAAGTTCCACATTTTCATGATCAATTGCTTGGTCTGCATTTTTATCCATTGCCCTGGGCACG
CAATAGACCTTTTCACTCCAGAGATATGAGTCCCTTCAGTTCTGAAATGTTTGCCTTTATTCCATTGATAATTTTATGCC
TCTATTTTCTCTGTTCTTTCTTCCCTTGAATTCTCATTATCTTAGTTGGATCTCCTAGATCATATGCTTTAATTTCTTAA
TTGTTTTCTTCTTTTGTCTTTTGTCTTTTGGTCTTCTAGAAGATTTGTTTCACACACATTTTTATTTTCCAACCTT
ACTATTAATAATGTTTATTTTGGTCATGATTTAAAAATAATTTAGCACTCTCATTCTCTCCTTTTTTTTTTTTTTTTT
TTTTTTTTTTTGGACGGAGTCTTGCTCTGTCCAGGCTGGAGTGCAGTGGCATAATCTTGGCTCACTGCAACCTCTGC
CTCCAGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCGAGTAACTGGGACTACAGGAGCATGCCACCACACCCAGCTAA
TTTTTGTATTTTGTAGTAGAGATGGGGTTTCCACATGTTGGCCAGGGTGATCTCGATCTCTTGACCTCATGATCCGCCCA
CCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCAACATGCCAGCCTCATCCTCTCCTTTTTTAATGGTATATG
TTCTTATGTCAGAAGTGTGTTTTATCTAAGGTCACAGATTATTATCCTCTTGAGGTTTTCTCTGTCTCTCTCTTTCTT
GTAGATTTCTTTCTTCAGTTGATGTTTGTCTCTTCTAGTTTCTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTT
CATTCTTAGTTAAAAGCAAGACATATACAGGTGCATATGCACACACACACAAAACAAAGCAACAATGACAATGATGGCA
AGAAACAATGTCAGAAGTTCTGTGATCATGGATAGGGCTCGTCAACTGTAGGGTTGCACTGTTGCATCATAGGTTGTTT
AATCAAAGCCGGTGTGTTCTTTGAAATGTTTCCCAAGGTCATGATTAGGGGGTACCCCACTTTCTGCCTGCGAGATTT
GCGCCTGGGGCATATAACTGACTGCTAATGTCTGGGGAGCATGACAAATAAAAAAGTTGGGTTTCTTATTGCAAACTCT
ATAGGCTTTCAAATAAGCACCTATTTTCGCAACCTGCAGCCTCTCCTAGTTTGCTACAGTGCTTAGTATCATCAGTTTCA
AATCTCTCTAGCCGATTTCTTCCAAAAAGAAAGACTCCGCTTCCAGTAGGTAAGGGAAAGTAGTTAGTTTGGATCCAAA
GGCTCCATATAATTTAATACACTTTTCCAGCCCTCGCTAAACTCCTGCCTTCTTAAATCTGCTGCCTCCAAGCAGTAA
GTCTTTCTGGATTCTGGGAGAACACATTAGTCCACTTTCTTGGAAATTTACTCTCCGTAACCATTTCTCGATTATGCT
AAGGCATTTCACTATTTTCTGATTTTCAAAAAATCAGTAGAAATCTCTCCTTTGCTGATCTTGTTTCTTTTATTATTTG
TGCCTTTGTGGGTGGGTGTGTTGTTTATTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTT
AAGCAGGCATGATTTTACCCTCTCTTACTGGAAATCCAGGGGAACGATAGCTGAGGAGGAAAGTAGCTTGAAGAGCAC
CTTAGAGTAGAAAAAGACGGGAGAAGGTGAGTTTACAAAAGTACAGCAAGATGATGATGATAAATAAACTCAATG
CGTGCTCACTATGTATTTGCACTGTGCAAGTTCTTTACATGGATTATTTATTTGTGTTTGTGTAAGAACACCTCAGGA
AGTAGCTATTGAGACACAGAGAAGTAATATGACTTGTTTAGGTTAGTAAATGGTAGAGGTGGTATTCAAATTCAGATCT
GATTTCAAGAGACCATCCTCTCAACTGCCACACTATCTTGCCTCTACAAATTGCTTAAAGCAGGGATTTAAATGAAACC
GTACTTTTACAAAATCATTTTTTATGTCTCATTATTTAGGAGTCTCTCTACTCTATCAAAAGTATTAATTGACCTATTT
ATTAATATCTTAGTAATGTAAATGCTTTTAGGTTTGCAAATTAGTAAGAGAAACTTCTTCAAGTAAATAGATGCTGTC
TTTATGAGGACTGCATGAGACTTATGTACTCATCATTATATACACCCACAGACGATCTATTTGAATTCTGTACTCTTAC
TCTTTTGTAAATAAATGTACTCTTTCTAACTATGTTTTAAATCATCTGCAAAGAGATGGAAGCTGTGTGTATACAACA
GCAAACATCTGGAAGAAAAGAATATTCAGCCAAAGCTTGTAAAGAGATTCAAGCAAAGTATGCCTTTGAATTATGA
AAATGAATTCATGTCCAACATCATAAAGAACTCTGACATGTCTGTTTATGTTTCAAACATGGCTTAGAGATCACTGAGA
TTAAATTCATTAAGTGTGCTCTGTTGTCTTTGCTGTCAATTTTCAAGTTAAACCAGACTTGTTTGGCAGTTTGGGGAG
AAAAATCTTCAGTGTTTTACCTTGCTAACATTTTACCATTTGGACTTTGTGTTTTTCCARTCAAATGCATGTCAATTT
AAGGAGATGCTTCATGTTATACACACCTGGTGATTTTATCAGCAGTTGTACAGATGAAAGAGAAGTAAAGCCCCCAA
ATAATTCATCTTTTAGGCTTTGTAAATTTATCATTATTAATAATTTTAAATTTGTGAAATATAACAAAATTTAAGAAAGT
ATGTAAAAATTTAAATTTTAAAGTTTAAACAAATGTTCTAAAGTAAATACCTACTATGATCACCCCTCAGAAAGACCCAT
AATTTCTGTTTCTCCCTCCAGATAGGTCACCACTATCTTGACTTTTACTTTTACTTTTCTTCTTCTTCTTCTTCTTCT
TACCACGTATGTATGCATGCCAAACACAGTTCAATTTAGTTTGTGTTTGCATTTTATGTAATGGACTCATCTTGTAG
ATACTCCTGTGTTTGTCTCCTTTTGTGCAATATTATAGTTGTAAATTCATCAATGTTGTATGTAGCTGAGGATTGCAC
ATCATAATATATATCATGATATATAGCATTCRTTGTATAAAGGAACCACAATTTACTGTCCAATCTTCTTCTTCTTATG
CAGTTGAACATATCCAGTTTGGAAATATTATGAATAAAGATATTTTGAACACTTATGTGCGTGTATCTGTATGCACATA
AGCGTACATTTTGTGGGGGAATATACCTAGGAGTGGATTCTAGGGTCTAGCATATCTTTAACTTCAGCAGATAAGCAG
AAAGCATTTGACAAAGTGGTTGAGAAGGTAATGAGAATTCCTGTGTGCTCCACGTTCTAATAAAAAACACTTGGATTTTC
TTTCTTTTTTTTCAAATGACAGGGCTCTATAATGGGATCATTTGCATTTCTCTGATTACTAATGAGAGTGAGTACTCCTT
CATATGTTTAGTAGATATTTGAATTGTATTTGTTTTTGTGTTGTTGTAGCTCTTCATGAAAAGTACTTTCTAAACAGC
ATTTCTGAGCACCTTTAGGGAGCCAAAGGCCAAATAAGTTAGAGTATTTGTCACAACATGGCAATAAGAGAGGCGAAT
TCATCCATTAATTTGCTTGCCATATGCTTATCACTGGAATATATTTTGCAGCATCTCCTGACATCACTATTTATCCCTTT
TACCAAAAAAAAAAAAAAAAAAAAAAGAAAAAGAAAAAAAAAACATGGCTACTGATAATACTTGGGAGCACTCAACGAAGG
TCCCGTCTGAGACTCTGTAGAATATATATAGAATGCAAAATATCTTTGGATTCCGTCTTGTGTTGTTGTTGTTGTTGTT
CCTACCCTACAACTTTTTGGCATCTCTACCCAACATTTTTATAATACAGGACTGTCTCTGAGGTTTGTTCCTTATGGT
TGTTCTCATGTATAAAAGAGATGATGATAGCGTTTCTCATGCCAGTATGTCTGTGTATGATTTATGTTGTAAACAGTGC
AAAGAGCTTTACAGCCATTGTCTCACTAATCTTCAGAGCATCTTTTCGAAATAGAGAGGAGACAAGTGAATCAACATCC
TCTATATCACGGGAGGAAACATATCTCCCTGTGGAGAGATGTCCACTGCTTTATCGACAAGGCACAAAGCTGCGAACAG
AATTCAGGTTGTATTCTGACTCCTACACTAATGCCATGGAAGTACAGTATGAGTAAATTTTATATGCGTGAAACATGA
GGTGATTCATCACTGATCACTATTAGCMAGTGGCTAGAACATGAAGTGTGTTGTTGTTTCTTCAAAAGAAAGATATGA
TGAAACTTTATATGCTTTTACACAGTTCTGATATTTTAACAATTGACTAATTTTTATAGTTTTATTCTTCCAGAAAT
TCCTTTAACTGTGCTTTATCCCGTAAGTAATGTCTAATGTTCTTAACTAATCGAGAAAATCATTCTATTAGTCCCTAA
ATACCAGACTTCATACCTTCTTGGCTTCCCACTCTCCTCATATCTAATCTCTCCTTAGGTTTAGCAACAAAATGTGCA

331/375

GCTTGACRTGGTCAGTGGGTGTCTGAACATTTAGTGTCTAGTGTTCCTCTCATCTCTCTGCTTTTATTTGGACTTCTCA
ACTCTTAAAGTAATTTTAAACATATTATAAGAAATCTTTGAATTTATAACACTTTACAGTTTATGAAAGACATATAAAA
GGTTCCTTCTCACAGGCTGTAAGGGGTACAAGGACAATGAAACTCAGATGACATCCTTAAATGCAGCTACTATTATAT
GGCTAATTTAAGATTAAAAATCTGGTTTTATAATTATTAGTCTAGTGGTCCTTTTATAGGCAGCATAATACAGTTGTAA
GGAGTACAGACTGCCTGTTTTTGAATCACTGGTCCATGCTAACTAGCTGGCTTACCCTTGGGCAAGTTACTTGAGGTTT
TCTGTGCCTCAGTTTCCCCAGCTATCAAATAGATCTAAGAGTTGTGAAAATTCAATGAGTTGATACATATAAAAAATACT
TAAAGCAGTGCCCTGTCCAACATAAATGCTTAATAAATGTTAGCCCTATTATCTTTCCTCATTATTTAGTGTAAAGAGC
AAGAACATCTATAAAAAATAAAAAATCAAATAATCCTTCAAAAATTCCTGAATATTATAAACTAACATATAATGTCAACT
AAAATTGATACCAATTAGTTTCTTATCTTGAATGAAATCAGTATTGTAGTCAGAGCCAAGCTACTGACCTGGATTTCAC
ATATAACATTAGTTTCTCTTCTGAAACTCCAGCTCACTTAGCACATTTATGCCAAAAACAACAACAACAACAACA
AAAATGTATAAAATGCTTCTTCTGAAAGTGTAACTCAGGTTTTCCATACAGCAGGAACTCTGATAGAAGTATA
GATTAATAGGCAAGGCATTGCTCCATTCCCTAAAGGCGTAATAAGGCTATTCCACAAATATGTATTGAACCTCTACACA
GGTTTTAAGAAATTATGAGGAGGAGAGAAGATATTGTAATGAATCCCTACTATTCTGTTTATTTTTTATTTCTTTTTAACT
TTTTAAGTTCAGGGGTACATGTACAGATTTGTTACATAGGTAAACTTGTGTGATGGGGTTTGTAGTACAGATTATTTCA
TCACCCACATATTACACCTAATACCCATTAGTTGATTTTCTGATCCTCTCACTCCTCCACCCTCCACCTCTCTGATA
GGTCACAGTGTCTGTTGTTTCCCTCTATGTGTCCATGAGTTGTATCATTTAGCTCCCACTTACAAGTGAGAACATGCA
GTTCCGTGTAGTTTGTCTAAGGATATTGGCCTCCAGCTCCATCAGTGTTCCTGGAAAGGACACTATCTCATTCTTTTT
TATGGCTTCATAGTATTCCATGGTGTATTATGTACCACATTTGCTTTATCCTGTCTACTACTGTTGGGCATTTAGGTTGA
TTCATATGCTTTTGCTATTGTTAATGCTGCTGTAATGAACATACACATGCATGTGTCTTTATAATAGAATGATTTATATT
CCTTTGGGCATATAACCAGAAATGAGATTGCTGGGTGAATGCTAGTTCTGTTTTTAGGTCTTTGAGGAATTGCCACAC
TGCTTTCCACAATGGTTGAACATAATTTACATCCCATCAACAGTGTATAAGTGTCTCTGAGTACCTGTTATTCCTTT
GAAGAAAAATCACTACCAACTAGATAATTTAGAGAAGGAGAGAAAGAGAAAGAGAGAGAAGGATGGCACAATAAAGAT
GTTTTTTGGAGGCAAGGATGATGTTTTATGAATTTTTGTATTCCAGAAAAATAACAGATAAGTGGTTATTAGTGAATGA
AGAAATGAATGAGTTAACTAATTTGTAGCAGAAAAGGGAAAGATAAAATATAAATAAAGGTATCCATCTATTTAACAAAC
ATGTATTGCATGCCTAGGAATTGTACTTGGCTTGAAGACTTTAAAGTAGATTAAAGACAGTCCAGACTTCAAGGACCAG
CAACTGAGGGTGTAAACAGAAAGGACAATGACATTTACAACAAGCTGTGGGTTCACACATACCATTTCAAGACTAGAGA
AGAGAAGAAAAATCAGAGATTCTTCCAGAAATGAAATTCCTTGAGCTGGGGCTTTGAGGATGAGGAGAAGTTAGTTAGTT
AGAAAGGAAAGATGAGTAAGGTTGGGGGTCAATAGTTTCGAGCAAATATTGCAGTATGAAAGGTGTGAGAGAGCCTCAA
CAGGTTACAGATTGTGGCACTATAGGTGATGGGGAAGGAGTGAGAGAGGTAACCTACAGAGAAGTAACCTATTAGGAAC
GCTAAGAAATGTTAGATAATTATGCTAAAAAGCTTGAATATTTTTTAAAGCATGGGGGCATCACTTGATGATCTTTCTC
AAGGACAGGACTATTAACTCTTAGGGTTTATTATATTCTTCAATTTTGACACAATTTATACTTCAATAATTCCTCTGTAAG
AATTTTTTTCTTTGTGGTCTTATTTATTTATTGAGATAGGGTCTTGCTCTGTACCCAGGCTGGAGAGCAGTGGCAAT
CATGGCTCATTGCAGCCTTGACCTCCAGGCTCAAACGATCCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACTATAAGC
ACGCACCACTGTGCCTGGCTAATTTTTTAAAAATTTTTGTAGAGACAAGGTCTCCCTATGTTTTCTTGGCTGGTCTCGAA
CTCCTGGTCTCAAGCAATCATCCCACCTCRGCCCTCCCAAAGTGCTGGGATGACAGGTGGGAGTCACCACATCTGGCCTT
ATTTTTTTAACGTATTTTTTAAAAACCAAGAACAGGCATTTCTGCGTAATGTGCCCTGCATTTTGGCTTTGTATTTAC
TAATGCTTGAATTATTGCCTTAGCTATACATAATCACTGAAGAAAAGTATTTAACTTTTAGCTACAGTGATTTCTCAT
ATGGAACATGTATATCTCAGGGATTGTGGAAATGTCTTGGAACTCTATGACCCCTCAAATTTGAGAAATGTTGATG
TGGAGGTAGAATTGGAGTAGGCAAGGGAAGACAGGTACCAGGAAAACCAAGTTTCAGAGCCTACTACAATAATCATATGA
GAAACAAAGAGGGCTTGAACATAAGGGAGTTTCAGATGAAAGAAAGATAATAGTTATTTATAGATAAAAATAGACAGAA
CTTGGTGACTTCCAGGATTTTAGGCTTGAGAGAGGGAGGACTCAAGAATTTGTACATGGGTTTCTGGTTTCAAGTATG
ATTTCTGGCATCTGCTGTCCATAAGATAGTAAAACTGCAGATAGGGTAAATGCCAGTATTGGAAATATGAAGTTTGAG
GTGTCTGTGCATCCAGATAGAAAATTTATGGAATGTGGAAGAGCAATGTAAGCTGGGGTTTTTCAGCACAAATGGTAGGT
AGGTATTGTAGTTTTTGGGGGTGAAGGTACTCACACAGGCAATGAGTAGACTAAAAAASAAAAATATAGAGAAAAGAGA
ATCCAACAAAGAGATTGAGAAGTAGTGGCTGAGAAGTAGGCAGAAATTTAGGAGAGTGGTGTCTCAACTCCAAGGTAG
GAGAGAATTCGAAGATTGGAATTTGTAAGAAAATTTGATGGAGAAGGTATTCTTTGAACTGTGTGTGAATAGACAAAGA
GCTCTGACAGAGCAGAAAGGAGGAGGTATGGATTCTGGGTGAGGAAATGTTATAAGCAGTCCCAAAAGAGTGACATCA
GATTTATACAAGAAGCCAGAGCTTGACTGTAGTGGGCAGTACAGCATAGGGTGAAAGCATAGACTCTGAAACCAACTC
CTTAGGTTCAAATCTCAGCTCTCCACTTTTAGCTATGTGACCTTGGCAGGTATGTAACCTTCTAAAGCCTCGATTTT
CTCCTGTGTAAAGTGGAGGCAGTGATAGTACATTGTTAATAGATTGTTTACTTTTTACTCTTCTGTATAGACGGACCCC
TTGCAAAAGTCAGGGTGATTTTATATATACAACATCGTTATCAGCTACCTCTGAATACTTGATTCTTTTCTTCTTACAA
CCCCAACCTCCATTTGAAAAGTTCTCATTATTCTTTTTCTTACCTATTCTAAAAAGTATCACTCAGTCCCCACTTCTCC
AGGGAGCTTTTTCTGACGAGTATTGAGCTCTTACTTCTTAGACCTCCAGTAACATCTAATGTTTGTCAAGTACAATTAAG
CACTTGCTTTTTACAAAATAATTGTGGGAGATTATTTCTAATGGTTTTCATGTTTTTAACTCTTCTATCCCCAAGAAAGA
TTGTAAACTTCTTAAAGTCAAGATACATCTCCAGGGTATCCGCACATTTTGCCGTGCCTGGGACACTCAGTTTATGCCC
ATTGTCCTGATAGATTTTATATGAATTCATAATTATAGTGTCCACTTTTGACTCTCTCAAGAGGGTAGTTGTTTGCAT
GATAAATTCATGAAACAACCTGGATATAATAATACATACTTTTGAATTAGTAACAAATATTTATTGAGTGGCTATAG
CATATCTATTACAAAATAATAAAGCAAGGGGAGAAAACGAAGTCAATAATATGCCATTGAGAGATAATTTTCTC
TGTCTCTGTGTGTGAGAGTGTGTATGTAGAGAGAGAAGGAGTTTTACTAACAACAATGAGATTATAGAGTAATAT
TTTATAATCTGCTTTTAAAAATTTACAGTATATTGCATCATGAACACTTTTCTTACCATTAAATACAATTCTCTATATA

332/375

ACATTTTAAATGGCATTTCCTTACATGAATATACTACACTTAAGCAATTTTCTATTATTAAATATTTGAAGCTCTCCCCA
 GATTTACACATTATAAGCACTATTGTGATGAATATCTTTGTGTAGAGTCTTTATAGCAAGGCTGGGTGTTTCTTACTA
 TATATTTCTAGAATTAGAATTGTCAAACATAAGAAATGCCCAATATTTTAAAGATTTATTTTGTCTATTATTGTCTAT
 TGCCCTGCAGAAAGTTTATATATACTTCATCAGCAGTCTCTATTTCTACATTATTTCCGTGCTATATTTTATCATTTT
 AATTGTTCTCTTTATTTGATGAATCACATAGTATTTGTTTAAATAAGAAATTAATTTAGCTTCAAGAATATTAAATCT
 GTTTTGTGTGCTAATGGCAATTATACATATTTGCTTTTATTATTTTATTATTATTTCGTGGGCTGATTTGTTTTTTC
 TTGTTGATTTTATTTTATTTTATTTTATTTTATTTAGGAGACAGGTGCTCATTGTTGTTGCCAGGCTGGTCTCAACTCCTGGAC
 TCAAGTGATCTGACTGCCTCTGCCTCTCGAAGTGCTGGGATTACAGGTGTGAGCCACCACCCTGGCCTCTTATTGATT
 TTAGAGTGTCTTTAGAGATTAAGAATATTAACCTTTTCATTTATGTTTGTGTTTTTACACTTTTTTGCCATTTTATTCATT
 TCTATTTTACTTTTACAGATACTCTATTTTAAATAAATAGAAGTTTAAATAGTCCCTATGTAGCCTGTATGTTTATATT
 GTTTATATAGTCTCTATATAAATATATTTTATAAATCCTTAGCAATTCCTTTCCAACACCAATATTTTCTTCTAGTATT
 TAATCATTTTACATCATATATTTATATCTCTAATAATTATGGAATTTATTTTACTTTATTTTCAGGGCTCTGATGTTCTT
 TTCCTAGATTTTCTAAATTGTGAGAATCCTAGGTATTACATAATCTATTATTTTCTTATTGGCTTGAAATGCCACTTCT
 ACTGTTTATGGTTAGTTCCTTTTAAATCTTTACATCCTATTTCTAGACAAAAAGCCCCATGTTATAATTATTATGGAT
 TTTAAGAAATACATTTTAAATATCTGGGAGAACATATTCCTCTTAATCTTATTTTGTAGAAATTTCTGGGTATTCTCA
 CATCGTTGTGCTAAATTATACAAACAATCTACTTGTCAAGTCCCCCCCCAAAAAACCATTAAAGATTTTGATTGAAAT
 GCATTAAGTTGCTTATAAGCAGTTTATAAGTACTACAGAGCTCCTTATGATATCCCTGCCAAGTACTTAAGAACTCCT
 AGTTCTTAAATTACAAATATTCCCAGTCAAGAAAGGATCACCAGACATTTGAAAAAAGACAAAAAACCAACCAACAA
 AAAAACCAGTAGCCTAAACAAAAAGGAATAATAAATAACAGGACAAATTTATTTTCTGAGACAATTTATCTTCTGCT
 TTTCCAGAAGAAACAGAGACAATGAAAAGTGTGGGAAAAATTTGTCAATATTAATTTTTCAGAGATATTTCAGGGGAGA
 ATATAACCATTAAAGTATGATCTGATTTCCATAAATAGCAGAATACTGAATATATATGTATATATAAAGATTGGATAAAA
 TGCAATTCAAGTAATATTCAATCTTGAATATTGAATTAAGCAAATATCTTAGAATATAGAGCAAAAAGCCAAGGATATA
 AAATATGATGGAAAAGTAAAAAGATATGAAGAATGTGGTAGAAGTGGAGGAATGGGAAAGGATGTGGGAAAAATAACAG
 AAAAAAATCCTTGACCTGAAGAGTAATTCAGTCTCAGATTGAAAAGTTTCATCCAACCCGAACAAGGAAAAAAGG
 ATACATATCTAGATGTGTATACACATGCTGATGAAAATTTTGAATTTAGAAATTAAGTATAAGAAATTAATCCTTCCAGAGAAC
 AAAAAAAGGATCTTTCAAAGGTATCAAACCTTCTCATCAGCAAGATTAAGATGAATGCAGACTAGGCAAGGTTTCAA
 AGTCTCAGGAAGAAGAACTAGAACCCAAATTTGATAGTCAAACCTATCAAGTGTAAAGACAACCTAAAGATATTATTA
 ACATGGAAGGACTCAAGTTTACAACCTTACCTCTACAGATTCTTCTTAATTAAGGAAGTATTACTCGAAGATATAT
 TCAAGCAAAACAAAGCAACGGGAATCCTATACAGAAAACCTAGGATACAAAGAGCATTGGAACCAACCCAGATGTTTAT
 GAAAAATAATCCCAGTATGACAACCTGTGTAGTAGTAGGCCCTAGAAAGCAGGCAGCCTAAGTTAGAGTCATCAGAAGGTT
 CCAGGAAAAATGCTTTCAAGAAGAAAGTAGACATCACATTTGCAATTGCATAATTAAGAGCCTTTTAAATTTTAGGGC
 AAAAGTAAGTGCATTTAACTCATAGATTAATCTAAGACTTGATATCTTTATAATATTGACTCTTCCCATGTAGGAACT
 AGATATATCTTCAAGTTTTTTAAATATGCTTTCAGTGATGTTTTGCAATAATATTTATACAAGAGTTTTACATTTTTC
 GTTGTATTATTTATACATATTTGATATGTTTTATTACTATTATGAATAGGATCATTTATCTATTTTCTAACTGGTATATA
 GAAAAAACCTGTTGTGGATACATGCTTTATAATGTTTGACCTTTCTTATAAATCATATGTTCTACCTTTTTTTATACC
 TTTGAGTTGATTCTCCTGAATTTTGTAGTTACAGAAATTTTATCTTAAATAGAATGATTTCTTCTCTCTTAAATATAT
 TTGTACAGCATATTTGGTTTTCTGTTTGGTTGCTTACGTTAGAATTTTCTGAGCAACATTCAAGTAATAGTGAGACAG
 CTTCTTTTGTCTGATTTTCAATGTTAATTATAGATGTGCAAGAAAAGCTATTCAATACCATGAAAAGGAACCTATTCT
 ATTCTTATGTACTGAGAGTGCTATTTTACTATCAACTCTTTAATAAGTGTGATATACTACTGTATTAGGCCATTCTCA
 TGCTGCTGTGAAGAAATACCTTAGACTGGGTAAATTTATAAAGAAAAGAGGTTTAAATTGACTCACAGTTCTGCATGGCTG
 GGGAGACCTCAGGAACTTATAATCATGGCAGAATGCACCTCTTTACAGGGCAGCAGGAGAGAGTAAGCACCAGCAGGG
 AAAATTCAGAAGCTTATATAACCATCAGATCTTGTGAACTCATTATTATCATGAGAACAGCATGGGGGAACTGCC
 CTATGATTCAATTAATCTTACCAGTCCCTCCCGAACAACATGTTGGGATTATGGGGATTACAATCAAGATGAGATTTTG
 GTTAGGGCATGGCCAAACCATATAATCTACATTAAGGACATGTTTAAAGTGGCAGGATAAATGGTGTGGGCTCAACTTTA
 TACTATAGAGGACCATTATAGCAATATCATAAAAGTAATACTTTGAGAGACTAAGCCAATAATAGGACAAATATAAAT
 TGAGGAAAAGATATACAAAACCATTTAGTAATTCAGCATCTAGTGATAATTGTATAACCATATGGACAAAGGTAGAGA
 AAAATACCTATAGAAAGTTTGAACCTTAAGAGATAGGTCAAGTAACAAACCCACTTTTTTTCTTTTTTTTTTACCTGA
 TTACTTCTGGTCATGAGGTTCAAAATATTTGATAGCAAAATGATTTAAAGTCCAAATTAATATTGAATTGAATATACA
 CATTACAGCCAAAACAGACCTATTTTTCTGTTGCTTATCATATATAATTATAGAAAGCATAACTGAACAACAGGAAGT
 TATTACTTCTTAAATATCAGAAAACATTTGACTTTCTCTTCTGAAATAAGGAACGGCAGTAACCGAATTCTAGTTACTG
 CTCTTAATAGTTTTGTAGTTCTCATAAAATATTGCTTATATATTATTGGCTCCACACTATCCATTTTGATGGTTTTTA
 AATTTTTCAAATAAAAAATAATGAGTTTTCACTATGATGACTTGACATCAGTTAAAGTGTAATTCATACTTGAA
 GATAGCAGGACTCTATGCTCTTCTCATGTTCTGGTCAAATACATTTCCAATCATGATAATCAATAATGTGACTATT
 AATTTTTACTTGAAAGTTAATCTATTCATGTTTGATTAGAAAGTGCTAAAACATAAACTTGGGATGTCAATGAAGAAGTT
 TTTAAATTTCTCTCCCAATGGCTGATAATCAGGCCATGATTATATTTTGAAGATTTTACCTAGTTAGTCATATTTGG
 GGTAAGAATATATGCTATCTCTTCATATTAATAGTTTCAGATCTTTAATTATAACATGTTTCATGGTCTATAAGATTAA
 ATTGAACATTAGGAAAGCTTAGCATTTCTCATTTGTGAGTCTTACATTCACACCTGTGAGGATTGGTACAGATTCAGC
 TTGTTTTTAAATAAACTTCAAAGAAGATCAAACTAGGGATCATCTGTTTCATGTCTTTGACGTGATAGAAGTTTGGGGC
 CCCCCTTTTGCCCTGTAGCTTTTGCCCTAAGGAGAAAGCCACCCTTTTCAGCTGATACTTGCTCCACAGGTTTTTCACA
 GTTTTTGAGTAGCGAGTGGCAAGAAGCAATATGACGATGTTGGTAGGTAGAGAGATACTTCTTACCATCTGGTGAGCA

TCTTGGAGAACACAGAGACAAGTCCACACACTGTTAAAGGAGTGGAAGTCATTTTGCAGCCAGTTTAAAGGATTGATTTAAGA
 ACTCTAGGAGCAGGCCATTATGTAGTCATCCATTACGACCGATTCTTCGTGGGACTGTTTACACTAGAAGGAACGTGAG
 TGATCAATTTAGCGTTGAGGAACTGAGGGCTACAGAGTGCCAGGGTCACGTTTCATCACACTTATTTGTGTTTCAAAGC
 AGAATCCACACTCCAAAATGTGCAACTACTGTCTTACTATGGAATTTACACTGACACATTCTGAGGTCATGCAGGAAAT
 AGACCAAGAGTAAAGCATTAGCAATTAGGTCAGTAGCTTGAGATAATGCAGGCTCTGAGGCAATCTTCACTTTCACTGAC
 CACAGACTGGGATTGGGAACATGGGAAACGTGTGTGTGTACAGACACAGCAACCCCTTTTCTATGTGTTCATGTCTTCAGC
 TGAGTTTAAAGTTGTACTAGTGGAAGCCATAGCCTATGTTGGCTCATAGGTCCTAGTGCCCTTTCCCTTCCCTTGCCT
 CTGCCCCCTGCCCCCTTTCCCTTGCCCTTGCCCCCTGCCCCCTGCCCCATTCCCCCTTCTCCTCTCCTCTCCTCTCCTCTCC
 TCTCCCCCTCCTCTCCCCCTCCTTTCCCTTTCCCTTTCCCTTGACACTGGGTAGAGTGTAATGCAATCATAGCTTACTGCGAGCC
 TTGAACTTCCAGGGCTCAACCAGTCCCTCCTGCCTCAGCCTCTGGGTAGCAAGGACAATAGGCACACACCATTATGCCCA
 GCTTATT
 TGGCCTCAAGCAATCTCTGCGCCTCAGTCATGCAAGGTGTAGGGATTACAGGCATGAGCCATCTCTTCCAGCTCTAGTG
 CTATCTCTTTTATAGGAATCAAAAATTTGTTTTTGGCTATTTTCAAAATTTTGTAGAGTAAGAGGTCATTTAGAAAAGACTCA
 GTTATGTTTTTCAAAAATGCATCTGTGTGCATATGTGTGTAGAAATGTATPAGAATGAAATAACATTTTTTTTACAGTGGCT
 ACCATTGGTTTTGTGAAATTTATGCATGCTTTTTTCTTAATTTTTCTCTAATTTTTCTCTATTTTCTTAAGATTTCTACCATGA
 GATTTTTTCTCTTAATGTCTAGTTTTTATTACATAGGTAATAGATAAAATATATTTCATGTGCATAAAATATTTTTTAAATTTCA
 GAATATGAGAAAAGTCCTTTTTTCATGCTCCTTAGTCTTGCTGTCTTTCTTGAAAGTATCCACTTAGTGATGGATACAATA
 TGGTGATATCTGCCTTAATCCATTTTGTGCTGCTCTAACAGAATACTTGAGACTAGGTAATTTATCATGAGCTGAAAT
 TTATTGGCTCACAGTCTGAGGCTGGGAAATCTAAAATCAAGGTGCTGGCATCTGTTAAGGGTCTTTTTGTGTCATCA
 CCACATGGCAGAAAAGCAAAAGGGAGAGAGATAGACAGATTGGGAGAGAGAGAGGAAAGGGGACCAACGCTCTCACTCTT
 TTATAACAAACCTGCTCCAGTGATAACAGGATTAACCTTACATCAGGGCAAAGCTCAGATGACCTAACACCTCTTAGA
 AGTCCCAACTCTTGCTGGATGTGGTGGCTCACACCTGTAATCTCAGCACTTTGGGAGGCTGAGGTGGGTGGATCACTTG
 AGGTAAGGAGTTTCGAGACCAACCTGCCTGAGCAACATGAAGAAAACCTATCAATACAAAAAATACAACAAAATAGCTG
 GGCATGGTGGCATGTGCCGTGAGTTCCAGCTACTCTGGAAGCTGAGGTGGGAGAATCACCTGAGCTTGGGAAGCTGAGG
 CCACAGTGAGCTATGATCATGCCACTGCACCTTAACCTGGGTGTTGAAGTGAGACCCTGTCAACAAAAA
 AGAGTCTACCTCTTAATACTGTTACAATGGCAATTAACCTTTCAGCCTGAGTTTTGGATGGAACAAACATTCAAACCAT
 AGCAGTATCTTTTCAAGATTTTTTAACTGAATATTTATATATGAAACATTAGAATTAGGGGTAATTTTTTAAATCAAA
 AAGTGATATCTATCAGATGTTATTTGTGATGATCTTTGCACTTACTATGTTTTGGAGATATTTTTTATTTTAGTACGT
 ATAAATCTATACCAGTTTTTCTTAAATTTGAGCAGATAGTATGATATCAAGTTTATCCTTTAACTATTTTCTTACTGATGG
 CCTTTTTTAAATATTGCAAACCATACTACACTTAAACATTGTGCTGTCATACTTTCCTTGTGTATTACATTGGTTTTTAAATC
 AATGAACTAGTTGTAAACATGGAGAGAAAACAACAAGGAGGGAGATGGATATAAGAGAAGAAGAGATTAAAGGGGATGGA
 ATCAGTTGTTTTCTGGAGCACAGAATATTCACCAAATTTGACCAGATGCGCGGTTGCTCATTTAGGAAAGAGCAACTGCA
 CTGGGATGAAGAGGTTTTTTTAGGAAATCAGAGGTCTTCAGAGAAGTTTTGGTTAAAATCTGCAGTATACACTACCÀAAA
 TGGTTTTTGTCTTTGTGTTCTTATGCAAGAAAGACTAGCTCTTTTTATCTAGAGCTGGAAGGTTGCTGTCTTGGAGTG
 GGGGAGAAAGGAGACAAGTATCTGATGGGTGGGAATGGAAGGTGTGTATCCTTGCAGCAGACCTCCAGAGTAGCTGACT
 GACTGATATGCATGGTAGTCCTAAGATGTGTTTGAGAAAAGAAAATATTAGGAGCTCTTGACAAATCTTGAAAATCAAT
 ACAAAAATTAGCCAGGCGTGGTGGCGTGTGCCTGCAGTCCCAGCTACTCAGGGGGCTGATGCAGAGAATCCCTAGAACC
 TGAGAGGCAGAGGTTGCAGCGAGATCGCACCACTGCACCTCCAGTCTGGGCAACAGAGTGAGACTCTGTCTCAAAAAA
 AAAAAAAGAAGAAAAAATCAGTTGCCATCCTGCAGATATACAGTATAGTGTAAGTCTTCCAGCCGCTTGCAAA
 TCTCTTTTACAATTCAAAACAAATTTATGGAGAAATAAGAGTGAAATATTTTCTGGAATAATGTGAAAATTTGAAG
 TTTTAAATATCATAGTTAAATTTGAATGTACCTTAGGGACAACCTCTTTATTTTAAACTCCAATTCCTCAATAACACACC
 TAATATTGTTTATTGTTGTTGTTTAAATATTACTCTATGTAGACATTATGCTAAGAGTATAATAGCCTTTTTTAAATTTAG
 AAGAGCACTCTAAAAGCTATTACAGCTTTTACAGACAAGAACTTGAGACCAGAGAGAGGTTAAGTAACATTGACCAATTG
 TCATATAGCATTTAAGTGGCAGAGTTAGGATTTGAACCCAAGTTTTTATGTATTTTAAATTTCTGGCTATTAAACACCACA
 CTGCAAAAGAACTTATTTAGTAGATAACAAGTTATATCCATATATTTTTTAGATATCAATATATATGTTGTGGATCGGTA
 GCTTGGGGCACATTACTGCTTTGAATTGTGGTATCTTTTATTAGATATTGAAATACTGGATTATTGATAAGACCATGTA
 GCAGTGAGAAAAATAGTTTTTGTCTTGATTGTGTGTCAGTTATACTATGTTGTTGGAGCTTTTGAAGTAGGGAGTGATCA
 GGTAGAGACAGGCAGAAGAGATTAGTTTGTATGTGTTATCCTGAAATCTGAGTTATTTGACATTTTTTAAAGGAAGGCAT
 TGATTGAGTTTTATGAAGATAAATTGGCAAAGAAAAGTAATCCCATCTGCTCAATAACAATTCTTTGCTTTTAGCCAAG
 AAAATTGATTTCAACTTGAGAGTAATAATCATATTTATCACACTTGTTAATTGCATGAAGTGTATACAAATTTGTGAGGC
 TTATTAAGGTAGATATTACGGTCACTGGGCGTTCCTCACATTCCACATTTTCATTGTTATGGCATTAACATTTTTTTC
 TGTCTCTCTTTGTCACTGAAGACTTCACGTAGTATAATAGCCAGTATTTTCTGTGATTATATAGCAATATTCTCAA
 CCTAATTGTTTCATACAAAGTACAAATCAGGGACTTTTTCTACTAGGTTCTGAAGTACTTGTTCTCTAGATTTAAACTCC
 AGTGTGTACTAATGGGAGTAAGTTTTTCTTTTATCTGCCAAGGAGCTCCTCTTACATGTAAAAAAGCTGTTGTTTTTCC
 TCTTTGTAAATATCAGTGTAAGTACACACTGTATAAAATGTAAATTACTGATGTGAGAGTGGCCATTTTATTACATT
 GTTCAATGCCAAAGTGGGCCAAAGGATTCTGGCTCATTAACTTTAAGGAACTATAGTATCTTTTGTCTCTTTAGCCT
 TCCTTCTGGTTTTATTCAAAGAAATCTCATCAGGTGTGATCAAGAGTTGAAAGAGTAAAGCACTGTTCTTAAAACTGCTCT
 CTAGAAAGATCTGCAATGGTTTTGAGGACTGCCAAGCAACAGGAGGTAGAAAAATGGATAACTAAATTAACCTATTATAC
 AGAAAAATATGTTAGGTTAAATTTGCATAGGAAAAAGATAGTATGGGTCTTTTAAAAAATGGATATTTTATACCAAGAAAG
 GATAAAATTAATAAGTAAGTTTATAAGGAATATTTAGAAAAATAAAAAACGATATTTTAAAGACAATACTTTATATCTTTTC

Fig. 6.328

334/375

[illegible]

335/375

GATGCATACTGACTCAGGAAGCTACTGGAACCGTCTCACCACAAAGGGAATAAACTCTAAAAACATTACCTTGG
GATAATAAGGAAAGAACATCCCAAAGTGACAGCTGAGCAAGAGACATGGAGAATAACCAATCCAGGTCAAAGAGGCCTC
TGGATGAGATTTCTTCAAGAAGATGAATTTAATAAAATTCTTGATGTGTTTGAGCCATACTTAGATTTTGTAAATGG
GAAAAGTTTGGGATTGAATTAGTGATAAGTATATATGGACATCTAAGGGAAACAAAGAACTAACAAAGACAAGAATTT
TCAAGAAGGAAAAACAAAGAAAAAAGGTAATCAGGGTATGTTACATAGTTTAGCTGCTTATAGTTTCTTTGGTTCTG
CTCATGGAAACACAATGACTATCAATCTAAGTAAGACTATAATATATTAGAAGGATGGGTGATGAGAAGTGTGAAGTGT
TGCAAAGGTAAATCCTTATCTTCCGCTATGAAGTATCAATAAGCAATGCCCAAAAAATGAACTATTAAGAAGTAAGTG
TAAAGTTATATCATTTAGAGATAGAGTGGAGTATAGCAAATGAATCAGCTAAAATATTTGAAAATGGGTACCCTCTGGG
GAGTGGAAGATACATGTATGTATGTGGGTGGGGGATGCCTGCAGGAGATCTCTTTTTTAAATCCTTGTGGTACTACT
TAGTTCTCTAAACTATTTGTCATCTATAACTTTGCTAAAAATAACATTTAAATTTAAAAATTGATCACTCTTGTAAATAAG
TTCAAATGAAACAAGGAGATAACATAGTTGCTAAGTTTATTTTGGACATATTTATAACATTGTATATGTGTTAGTG
AGAATACCATGTAACATCACTCTCAAGCAGTACTTCTAAAAGTAGAAATTGCTGTAATATTTCTCAAAAACTATCTGGC
AATACACATTAAGAGGTATAAAATGTTTATTCCTTCTGACTTAGTACTTCTGCTTCAGAAATCTCTTACAGTGATCTA
CCTTCTAGAAAAGACTGGAGATAAATACATCAAAATGTTTCACAGTAGTTGTCTCTGAGTGGTAGAATTATGGGTAAAAAA
AAGATGGCTTGTTCCTATTTTCTTTTGCACCCCTCTGCATTTTTTCCAAATAATCTATAATGAAGACAGGCTCCTTTT
ATATTTGGAAATAATTTCCAAATATAAACATTTTAAATTTTATAACATTTTAAATTTTTCAAAACACTGGTCCTCATAAC
AAGAAAAGTTATTTGTTGCAACCACAGTAGACCAGGTAAATGGTGCCAAGAGTGGAATGCCGATAAAGGCTGACAAGGC
CATCTGGAACCTGTGAGTCATTCAGAGCATCACAGAAGAGAGATTTCTGCAAGTACTAGCTGTGTTGACTGTGACTGCT
GTTTTCTGCTGCTCAGGAATCACCAGGGAAGGAGAGGGCTTCCCCACGGGATTAGGGAAAAAAGCTTC
TTGTTCCATAAGAGAGTCTACAGATAGGATGAGTAATAAGGGATAGATTTTACTAAGGTAGAACAAATGTTAGGACGC
TGGTACGAGCACCCTGAAATATCCCTATATCAAGTTTATGCTTTTTCATTGCATCTTCTGAACCTGCTGGAGATGCTT
TCACATGGAACGTATTTGCTATAAACTTTTCTTTTATCTTTTGTTCATGCTGTGAAGTTTGCTAATCTTAATGAACCA
GTCTCTTCATGCTGACAACTCATTTGTAAAGAGGTAAACCTGTGTTTCCATGGTATGGGGAATGGAGAGGTATAAGGAG
GAAGATGGATTTAAATTTGATTTTGGGAATGCTTGTCTTTATTTTATCAGTTAAAGAAAAGGCTAACGGATATTTAGAT
AACTTTAGGCTCCAACCTGCACTGATCTGTTTGTCTTCTTTTAAAGAAACCATTTTGTATTCTGACTACTTGAATTTGCAC
ATTTTGTTCCTTCTCTCTGGAATACCCTAACAAATCTTCTGCTGATAAACTACTTACTCTTCCAGGTCAAGTTGAA
ATGTTCCCTTCACTGTGAAAACCTTTCATGACTCAAAAAATAACAATTATAATAATTACAATTTGATGAGCTACCTGGCT
GTTTACCTAATTCTCACACCATTAGATGAGCGAGGTAGTTTTAGGCTAACTTTAAAAAGGAGGAACTGAGACTTACAA
GACTTGGGTATGTGGCCCAAGAGTACATAGCTAGATTTGAAACCCAAAGTCCAAACCCAGGACTTCTGCTTAAAGCCCC
TTCTTTTCAAAAACTACATTACCTATTGATTATTTTGTCTTACATGTGCTTACATGTTGATCTTCTCAGTGGACTGC
CTTCATTCTTAATAGGAAATAAATTTGCTTTTTTGGAGGTGTTACATTTTTCATATAACATTAATAAGATTAAATTT
TTCATTTGTTGTTGACATTTCTTGTGCTTACTCTACATCCACGGGATAGGATCCTTGGGCATAGAAACCACGAATGCTT
TGCTCATCACTGAATCCAGCATCTGTCAGTGTCTGCCATATAGGAATTGCTCAATATACATTTTGTAGTAAATAACTGA
ACTAACAAATGAGTGAAACAAAGAAACAAATGAATAAAAAACCTCAGATCTAGCCCCTAACAAAAAATACTTAAAAA
GTTTTAGTGTCTCAATTGTCTGTATAGACAATGATTTCAAGTTTCACTGAAATACACTACCAATATCAACAATCATG
TTAAATCAAATGAAATCTATATCCTCTGGGAATGCTTGTGGTATGGCTTAGGGACAAGCTTTACTTATGAACAATGATA
CTGAGACTTCACAATAGTCAGCTGTGCAGATGTCAGACTTTGCATTTACACATGCTTTTAACTAGAGCTCAAATAGG
CAGTTTTAAGCCCTGGACCTCAAGTCAATGTGGTTTCACTTTTGTCACTTCAAGATCTACAATTGAACCTTCAATACGAT
AGTCTTAGATGGTTTTTCATAAATTTTGAGTCATGAAAACTGACAACATATGAGTCTCCAAGTACCTTTTAAATATATG
CAATATTTTACCTACTTAAATKAATACATGTGTTTATTTGATACTAAAAAGTTTATAAAGCTAGAAATAAAGAAAAGT
CCATGTCCTTTTTCTTTTTTGTTTTTCTTTTAAATGAAAACTCATGAGAAATAAGAGGGCAGAAATGCAATTAATTTCT
TTCTGTAACAGCACAATTCTATATCAGATTTTAAATACAAAAGAACATGCAAGGGATAACAGCATGATGACTTCACTTCT
AATATAAATAAGGCAGGAAATTTGGGTGAAATCAGTTTTCTCTAATCTTACATGGAAAAAATTTGTCTTTTGGCAAA
CCCATATGAATCCGATCTGTTTGGTTTATTCATCCATGCAGTGACATTGAGCTCCAAAACTGTATCAGAAACCTAGT
CAATATTTAAATGCCATCATATAGATTAGAAATGGAATAAGGTATAGGTAACCTTACTGCATTTCAAAAAAGTACTAAT
TGAAACATATTGTCAAACATATATCTTTTTCTCTTTAGAAACCTATGGCTATTTTCTGTCTTTTCAAGCTACGCTACA
GAAAGGCCTATTTTCTTCTGTCTTAGTCCATTCAAGCTGCTGTAACAAAATATCATAGCCAGGCACAGTGGCTCATG
CCTGTAATCCAGCACTTTGGGAGGCCGAGGTGGGCAGATCACTTGAAGTCAGGAGTTTCAAGCCAGCTGGGCAACAT
GATGAAACCTAATCTCTACTAAAAATACAAAAAATCAGCCAAATGTGGTCACAAGCACCTGTAATCCAGCAACTCAG
GAGGCTAAGGCACTAGAATCACTTGACCTGGGAAGGAGAGGGTGCAGTGATCTGAGATCATGGCACTGAAATCCAGCC
CGAGTGACAGAGCAAACTCTCTCTCTAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATCAGG
AGCTGGGTGGCTTATAAACAACATAAATTTATTTCTCACAGTTCTGGAGACTAGAATGTCCAAGGTCAAGGCACGGTAG
ACTTGGTATTTTGTGAGGGCTCATTTCTGGGTCTAGATACGTGCCTCTGGCTTTGTCTCTCATGTTGGAAGGGGCA
AGGCAGCTCTCTTGGGCTCCTTTATAAGCCACTAATCCCTTATAAGGGCTGTGCTCTCATGACCTAATTATCTCCCA
AAGCCCCACCTCCTAATACCATCACATTGGTGATGAGGTTTTCATCGCATATGAATGTGGGGAGGGACACAAACATTCA
GACTATAGTATCTGCTTTTGGCCACAGAAATGAAGAATAAACACAGTCTTATAAATAAAAAATCTTTCCATGGTCCCCAC
CACATAAGGACATGACCAACTTCTTTGCTAGTCACTCATCTCTCATATCCTCTCCAGCCCATCTCTGCAGCCTCATC
TCCACCCACACATGCATTCTGCTGTAACAAATGGTGGGCAGGCTTCCAATGTACTGTGTGTTCCCATGAAGTTGCACCTT
TGCTGATGTTATTCTCTTTGCTGGGTCCCCCTCCCCATCTATTCACTCCTTCTGCACTTCAACCTTGCTCTTCTGTG
CCCTAATAGCTCCTCTTTTGTGACACATCAAAATTTGCCACTGTAGGAAGCCCTCCAAGACTAAGAGTGCCCTCTCT

336/375

[illegible]

337/375

AGGCTGACTCACTGACAATGTACACATAGAGGTGGGCTCGAGTGTGTGCAAATAACAAGTTTACTACTGCAGGCAAAC
 TCTTCGTTTATTCATTTGACAGATTTATATTGAGGGGCACTGTTCTAGGAGCTGGGGATTTGGTAATAAAATAAGATAGT
 CATGGTCCGTAACTCATAGAGCTTACACATAAACTGTTTTGCTTTAAATATTGTACATTGAGAGGTGTTTGTGCTCC
 GACCATATGACTGCAATATGTCAATTTGATAAACCTTTGAGGCATGACTTGGACCCACCCAGAACTTAGCTTTAAAGCTA
 TCAGATTTGACAGGAGGAGAGAACAACCTGGCTTTAGATGACAAATCATGGAATAATTATGAAAAGACCATCCAGTTTTTA
 ATGACTTTTACAAGAATAGTGTCTTGTGAGACTATTGAATAAGAAGAAATATATGAACATTTGTATCATTTCAACTGTCT
 AACTGATACCAACACCAATAAATATATGAACATCCTTATTATTCAAGTGTCTAATGAGTGAGGGACAGTGCCTGTAGGA
 AGGAGAGCCTCCCAACAATGGAAGCAGTGTTATTCTTCATGGTAGGGAGACCATTTTTTGGTTCTCACAATGACTTCC
 AGGCTGGAATGATTTCCAAGTAGGGCAGGGAAGACAAATATCTGAAGCCTAAGGGAAGCTCCAGGGTGATTCTTGTAGT
 TTTGTTTGGCAGACTTTCTAAAAAGCATTGTGAGATAGTTTTGGAGCAAGCAGTTTAGCCATCTACTACCACACAATAT
 ATTCAAATCAGAGTAAGCTGGAAGAAAGTCATCCAACATCCAAGTCTCAGCCTGGCCTATGTGAACATACTTCTTCTTA
 AGACTAAGCTGTAGGGGTACTATGCTTATTACCTCGGTGTGAATAATCTGTACACCAGCACCCTATGACATGCAATTT
 ACCTATATGACTAACCTGCACATATACCCCTGAACGTAAATTTAAAAATTTTTATAGATATGTTAAATTTGAGATGT
 TTATTGAACATCAAAGCAAAATGGTGAATGAACAGATATATGACACAAAAAGACTAAGGTATAATCCTATATCATGA
 GTGAATAGGAATTTTTTGTATTGTTGTTGCGTTAGTTGAGATTTTATTGAGCAGTAAATAGAGAGATTTAAATAGA
 AGTGGCTTAAGGAAGACAGATATTTCTCCTTCATGTAAATCTGAAAGTTGGCAGTCCGAGGTAAATATGGCACCTCTA
 TCCAGTACAGTCTTCAAGGACACGTGCTCTTCCATCTTATTGCACTGTGAGGTGTAGCCTCTGTTGCTAAATTTCAACT
 CACCATCCAATATGSGCTGCTCCGACTCCAGCCATCAACTTCACATTCTAGCCAGTAGGAAAGAGAAAACAATAAATACA
 GGCAGATAAAAAAGATAGATGACAAATTTCTCTTAAGGGAAGTTTCTAGCACATCATATAATATCTACATAACGCTTCTA
 CTACCAACTCAATTCACCAAACTTAGTTATATGGCAACACCTGGCAACCAAGGAGGCTGTGAATTTTCTCTATTTTGGG
 CAGTCACATGCTTACATGAAAACAGGTATTTGAAAACAAGTGATGAAGAAAAGCATCAATATTAGGGGACATTTAGCAG
 TCTCTGCCACAATGTTGCTTATTAATAATCCTGCATACATTTTAAATATTTAATATCAGTCTGCAACACTCTATTTGCA
 AGGTAATGTATAGTATAATCTTTACCATATGAACCTTAGTAGCCATGGTGTTCAGGAAAGTTGTGTTATTTTGTGCTAGA
 ATATTTTACCTGCCCTAGGTAAAGGGCCTAAAGATAAAATGTGCTAGACTAATTAATTTAATGGCATATAGCAAGAGAT
 TTCCAGCGTTAAAGATTGCATCTCCACCTGCAATTTGGGAAAGAAAAACTGATAGCACAAAATAAAAGTAGTGGGTGT
 CTTGAAAACCTGCTGATGCTCTTCATGTTCTTACCAACTCATATCCTCATCTAAATTTGAATCAGAGTACATTCTGAC
 CTTGTCTGATAGAGAGTCTTAAAGTCTCACGAGAGAATTACCGTCTTGTCTTAAACAAGACTGTGTCCAGCAGGCATG
 CCAAAATTTGATAGCTACAAATAGGGAGATTTGAAAGGAAAGAGGTGGGAGAGGTAATTTCTTTTAACTCAACTGCATC
 TGGTGGAATTAAGGTAGACAAATATTACCATTTTGTGACAGAAGGCAGACATGGCACTAAAGAGGGAGAATGAGCAACCA
 CAGAGCTGATTTAATTTCCAGTGGGGTTTATGGAAGCACCAAAACATGATGTAGCCAAATGTTCTTAAAGTATGAAGT
 AATTTAATTTGTTCCATCATTACAAGAAATTAAGCCAAGCACAAATTACATCCCAGTAGTAAAGGAACCCGCTGAATT
 GCCATTGTTATTGACTAAATGAAGTGAGATTTCTGATTACCTTGTCCAGCACATTTTAAATTTCTGTCTGTCCATTTATT
 CCAATCACATTACAGGGCCTTAACTGATCTTGACAAAATAAGCTACATTATTAAGGTGCAGTTTAACTGAGAAGCTT
 TAATTACTAGATTAGAGTTTTCAAATGGGCATGCTTCTTAGACTTCAGTACATTTAGGGATGTAATTATTAGAGATTCT
 TTGTTTCTGATGTGCAAAAGAGACCCAAGTTTAAAGGAAGACTTAAACTTACGGAAGTGATTTTTTTTTTTCTTCCAC
 CAAGAGTCTCTTTGTAGACAGGTGTCTGTTCTGTTGGGAGTGGACTTACACCTCCTGAATGCTGTGATTGAGAGAGCTG
 CCTCCATAGTGGAAGCCCCCGGTAGAGGGTAGTACCCAGATTTCCAAGGGGAGGGGAGTTGGGGGACTAAACGATGTA
 CAGTGAACCCCTCTCATAAGTAGGGTGTCTAGATGATTTAGCATTCAAACCAGAACACTTTTTAGAAATGAAAGGCAATGC
 TATTCATAATTACACTGGTATAACAGGCATAGACCTTGGAGTTCCAGGCCAATTAGGATGTATGGACTCTGTACCTAT
 AAGGAAGACAAGGCAATAGATATGTAACAAATCAATGTGATAGTCATTATAGGCATCTGGAGAATGAAAGGCTCTATA
 GGACACTGTGGGTGGGTGGGCATGGAGAACAGTCACTCTCTTAGGGATTTCTCTCCCTGGAACAAAAGTTACACTAAT
 CATGTGACATTACAGACATGAAGTTTGTAGCTCCCTCAACCATATTCAATTCTCTAACAGTCCAGTTAATGATTCT
 CAGATGCATTAGAAACTATGGAATATTTATAGAAAAGAGCCTTAAACAGGGGAAGTGTTTCATGCTTTTTTCAGTTCCAT
 TCAACAAAACATTTATTGGATACCTAGTATATGACAGCAGTGTTTTAGCACCAGAGATCAAAAATGAATTCATTATGGT
 TCCAGCCCCAGAGAAATTCAGTCTAGTAATAAACACATAATTGTGATAGACTGTTTAGTGTATTAATAACTTAAAGAGT
 TAACCTCTGATTTGGTTCTCATGCATCAAAACATAATATTGCCAGTCTCTATCTCTACAAGGAGCCCTGGATTTTTTCCC
 AGTCCCCTACTAATGCTAGATAATATGGCAAAATACACAGGCTGATCAGGCTGTTTTAGAGACTCTTTTAAAGCAGAGAT
 CTTTTGTTTTCCAGACTGCTAATTTATTTTTTCTACCCAGAAAGCCCTTCCCTACCATCTGAGCTATTCTGACCAATC
 AGCGAAGACAAGCTACAGAGATTTAGGATGTCTGGGCTAAAAAGGTTTGTGTTTAAATTAGATAAAATAATTTGAGAAT
 GCTTTCCAGGATTACTGTTCTTAACCACATTGATAAATGCTGGGAAGACTATCTCAGTTATCCAGCATTTGGATAACAGA
 CTGTTGGAGAAGAGTGAAGCTTCAGTGTGAGCTGGGAAAGATCCCAAAAATCCTAACATGCTCTAGGTGCCTGCATATA
 AAATTCATCATCATAGTGACTTTAGGACCACTTGCTATTTTTTCAGGCACTGCTTTACATACATAGTCTTATTTAAATAA
 TTTTCAGAATCATACTGTGATATAGGTACTGCTTTCTCCATTTTATAAATTAGAAAACAAGCTAGGTAAATTCATTTTT
 ATAAGGTGCCAAGCTAGTCAATCAGTGGCAAAGCTCAGATTTGGAAACAAGGACTGCCTTACTCCAAAACCTGTTCTCT
 TAAATTTTCAAGTGTGTGTAAGGTCCCTCACTGCCCCAGCATAACCCAGCATTTGGTCCATTCAAGGATTAAGAGGAACAG
 GGATCTGCCAGCCTTGTCTTCTGCAGAAAAAATGGGGGAGGCAGAGCTGGATCTAACCAAAACAGGTTAAATTTAAGTGC
 CAGGTTTTCCGTGAAGGAGAATTATGCCAGCAATGGTTTCTCACCTTAATGAATTCATTTCTAACCATTTCTTTGCCCTGC
 AAAGACAGCAGGATCCTGGGTCCACAGGGCCAGTTTCATGGAGAGGAGAAAGAGGCACATAATGGGAGCAAAAAGTGAA
 GAATTCAGCTGCAAAATGTAACGGAATTCCTCAAAGTGCTGGGTCTCTTCACTCCCTTATCTGGCAGCTCCTGTTTTT
 TCTCCTTTGCCTCCACAGTTGCCACTTTAAAAAGTCATTTTAAATGTGGCACATATACACCATGGAGTACTATGCAGC

338/375

[illegible]

Fig. 6.333

339/375

TCTTTTCATGTTCTTGTATTTTCACAGCAACTATCACATCAGAGAGGCTCAATAAATATGTATGGATTTTTTGTACTATTCT
CTTTTCAGGGGGAAAAAATGAGAGAAAGAAAAGAAAGGGAGGGAGGAAGATTACTCTCTGACCATTCTCGATAGC
ATACAAAGTCAGGAGGAAGAGAAATAAAATGTCGTAGTGAGATTTCAACCATATGGGAACCTACTAAACACATGTAT
TTGTTAATGTTTTGGAGTTACCTGCATATAGGTATAGGTATAGGAAAACTATTCCAGGTATTCCTCAAGAGGTGATA
GTTGTTGTGTGAAAAATGCATTCTAAAAATCAAAACAGGTTTAGATAATGCTTGTTAATAAAATTAATATCTCATTTTTGC
TGTGGACCTTCTAGCTTTTGGTAGGTTCTGTGCCATTAGAAAATCACTGTAAAAAGCCTACATATACAATATTTCCCAAG
CTTGTTTTGACCACAAAACGTCATTAGTAAGGAGAATCTTATAAGGACAATATTGATTGGAACATTCTTTGGGAAATGTT
TGAAATGATCTTCCCAGTAACCTCAGTGTAAGTGATGCTCTGTCTATTAACCAATGACAAATACATATTTCTTCCTACATA
GTTGACTTTTTCATGATTTGGTGTGGTCTTGTAAAAGCTATTCTATTTTGTGTTTGTGTTTTGTGAGACAGAGTCTCA
CTCTGTTGCCAGGCTGGAGTGCAGTGCGCAACCATCTCCTCCACCTCCAGGGTTCAATTGATTCTCTGCGCTCAGCCTC
CCAAGAAGCTGGAATACAGACATGTGCCACACACACCTGGCTACTTTTGTATTTTGTAGTAGAGATGCGGTTTTGCCA
TGTTGTCTAGGCTGGTCTTGAACCTCTGACCTCAAGTGATCTGCTCGCATCAGCCTCCAGAGTGTGGGATTACAGGC
GTAAGCCACTGTGCTGGTCTGAAAGCTATTCTAAATCATAGGTTGTTCTACTCACATTGGCTCAGAATCGGTTAATAT
TTGAGGGTTGATGGTGATGATGGAATAATAGTAACTGTTTTAGGATTGAGAATCTGTGGAAGGAAGGAACCTCTCAA
ATATTAACCTACCTTATTTAAAAATTAACCTATTTAAACAACCTCTGCAAGTGTTTCAGTATACCTACTATTGATTGAATA
CCTTCTATATGTCAGATACAGCCCTTGGTACTTTACATTTCTTATGCATTTCTCATAATAACCCTGTAATTTCTCAATGT
ATACAATGTGCTCAGGTCTTTTAAATGGCTTATTTTCAGATAATAACAAGTGAACAATGGCAAGGCTGGAATTCAGTTTC
TGAGTGACTCAAAGTCCATGCTCTTCTGATCTATCACACTATTTCCCATGAAGAGCTCTTATAGGTTGTGGATTCTT
CTGTGTGTATAATAACTTTCTTAGCCAAATCTAAATCTCCATAGATATTCTTGTAATAATATAAACTAATTTATCTTA
TTCGTGTATGGAGCCAGTTTATATACAAGTGAATAAGCCAAATATAACCGATATACTCTTGAGTTCTGAAATTTGTCT
CTATAATGCACACACAGTTAACAATGTAGGTTTACCAGTAGGCCAAAATAGTTTATCACTCATATGTGTTGCTTGTA
TGCAAGTAATGAGATTAAAAATTGTACATAAGAAATTACCTTTCTGAGACTCTGTTTCATAGCCTGTTTAAAAGGGCCTA
GTCTTTTCRGGAAATCTTTTGTGTGTTTTTCTTTTCTTTTCTTTTCTTTTGGGACAGAGTTTCGCTCTTATTGCCCA
GGCTGGAGTGCAGTGCCACAATCTCGGCTCACTGTAACCTCCGCTCCCGGGTTCAAGTGATTCTCTGCGCTCAGCCTC
CCAAGTAGCTGGGATTACAGGCACCCGCCACCATGCGTGGCTAATGTTTTGTATTTTCTTTAGTAGAGATGGGGTTTCAT
CATGTTGGCCAGGCTGGTCTCAAACCTTGTACCTCAGGTGATCCACCTGCCTTGGGTTCCTAAAAGGCTGGGATTACAG
ACATGAGCCACCATGCCCCGCTGTGTGTTTTTCTTAATCCAGTCTTCAACTGGACAAATGTCTCTTTGGCATTACTT
CTTAACCTTAGGTATCTCATAGTGAGAGAGATATAAATGCTAAACAGAGATTATGAGAAAGTTAAAAAAGAAGAA
GAAGAAAGCAGAGATACGATTCCGAATAAAGATTCTGGGCAAGTGTGATTAAATAATTGCTTTCTTTCTTCACT
CAGGAAAGTATTCTTAAGCTGGAGTCTTGGTGACTTTCAGGGAAGTCAAGTGAACACTTTTAGAGTGAATAATGATA
ATATGAACCTTATGCTCATTCTTCTGGGGGTGTTTGCATCAGATGCACCTTGTGTCATTCTGTTTCTCCCAATCATC
ATACTGGTGTATTGGTGAATTCTTTTAAATTTTACTCTATTTTGTAAAGGATCATTACATATGAATGATATACCATAAT
ACTTGTCAATTTTTATTTTAAATGTTAATATTTCACTTCAGTAAGACACCATGATCTGCTTGACCATTACCAAATTTTGGC
AATGTTAGTTCCTAATACTCTTTTAAAAAAGAGAAAGAGTTTGAAAGCAAAAGACTGAGAAACAAGAGATAGACGAGGG
TGATTACATGTAGGAAGCCACACCCAGGCCAGTATTACTGTTTGAATCTCRTTGGAAATAAATATTCTTATCTGATAG
AAAACAAGCATACTTACTGATTATTCACTCACAAATATTTGCTGAGTGCCTGTAAATGTGAGGAATTTCTAGACAGTT
ATAGAAAGGCCTAGACACAAATATAAAATGACATTAGAAAAGTCATACAGGCAGAAGCCAGCAAATTTTCCAGGTG
GAAAGATTGGCTAAGATGGGCAGTCTTGGATGGGATAGTCTTAGATGTAAATAAAAGGGAAAGGTATTGAAAAGCAGCC
GAAAAGGCCTATGTGAACAGAAGTGTGACATTAATACAATAAGTAGGAGAGAGTTGTGCAGCAGGTTCTTAAAGAAT
GAAACAATAAAACCAGGGTTTAAAGGAAGATTATTCTGACTTTATAAATAGGACTGTGTTGAGAAAAAGTGAATCCAAGG
AGATCCAGTAGTAGACCATTATATGAATCTAGAAATACACAGATGAGAATTTGACTGAAGGTGACAGTTACAGAAATTA
AGAAGAAATTGGTAAGTCAACTGGCAAAGTATTGGATGGGAATATGGTAGGGGTAGGAGTGGAGATAAGCAGAGTGAGT
GTAAATATACTCCAGAACTTTCTATTTAATAAGCTTTATTTCTGAGAATACCTCAATTTCAAATAGAAAACATGTAC
CCCTGAAGAACAGTTGAGCTAAACTCACAGAATTCAGGATCATGGTATTGGATGGGATCCTTGACAAGTAACTGGTCA
GTTTAGGAATTCCTCTACAAACATAGCTGACCCATCCAGGCTAACTATAATGAACAACCTTAAACCAACACCTAAC
CCAGATAGTACAATTTCAGAAATCAGATAATAAATGAATGATGCTGGGTAGGTGCTAAAGATAATCTGTTCAAAC
CTTTGTTTTCTCTAAGGAATCTGTATGCAGTAATTGACAAAGGTGAAGAACAAGACTGTTATATCTTAAGATTGAT
AGTATATGATGGAAACACAGATGCTCTCTACAGTCCCCCAGGGAATAAATTTGATTCTTAAATTAACAAGAAT
ACGTAAATAGCATACATAATTGTAACCTTTTTTAAACCTGTTTGCAAAATTTGCTCTGTAACCTTTGTTCAAACAACCTTC
CCAGACAAAAGCTTCTCTCAGTAGCATTCTTTAACACCTCTTTAGTCTTGTGTTGCTGAAATATGTGTTTGGAAATGAAA
ATTATCTTAGCGCAAACCTGTGGGTATATACGGTCTGTACTGAATATCAATGGCAAAGCCTTGATATTTGTCTTAGCTC
AAGCTGCTATAACAAAATACCATAAACTGATGGCTTAAACAACAAACWTTTATTTCTCACAGTTCTGGGAGCTGGAAGT
CTGAGATCAGGGTGTGAGCATAGTCAAGTTCTGGTGAGGGCATCTTCAGGGTGCAGACTGCCACATAGCATGTATCC
ACATGGTAGAAAGAGAGCAACCTCTGGCCTCTTCTTATAATGGCACGAATCTAATTCATGAGGGCTCCATTCTCATGAC
CTAATTACTTCCGAAGGGCTTTCCCTCAAATACCGTGACACCGGGGATTAGATTTTCAGCATATGAATATTGGAGAGAC
ACAAACATTTCAGTCCATAACAATATTTTCTTTGACATTTCTTTTTCTTTGCTCCTGAGAGTTTTTCTCCTAACTTT
CTGCAGCTTCTCCTTCCCCTTCAGGGACTGCTTAGGATTTTCTCCTTATCTGGTCACCAACCTCTTAACTGGTCTTTAC
TTTTCTGATCTGCCTTTATACTATTCCAGAGTAATCTTTTTGAAAAGCAAATCTGACCATGTGACTTCTCTCACTTAGA
AGATTTTTAATGGCCTCTTTAGAAGAAAATATTGTCTTAGAATAGTATACAAGTCTCCAAGACTAGTTCTCCATCTTT
ATCTTTGTCCACTGTCTGATCTAACTTTATATCCCTACCTGTTTGTAGCTTCTTGAATGGCCTGTGTTCTCTAAGTGA

340/375

ACTTCTTCAGAATGAATCCCTGTTTCATTCTCTTGAAATCTTTTTCTTTCTTAACCTACCCTAAAACTGTTCCAGGTAWC
TATTAAGTTTCTGACCCCGAGGTTATACCTAGGTATTAGTTGATAGGCTCACTAAAATTAATAGAATGTTTGCATTTA
AGTTAGAGACTTGAGTCCAGGAGAAAAGTGAAGATACAATGGAGGAGGAAGGGAAAAGAATCTATTAGGCAATCAATGCA
AGATTATTTAACTCACAACTCTCAGTTGAACTAAAATAACTTACAAGGCTCTTGTTATTATCTCCAATCTATAGGTGA
AATAAGGCCCTAGAAAAGATTAGTAGCTGAATTGCCCTGGAATTGCTTGATGAAGTGGAATAGAGATTGGAATCTTTCTC
CACTCTTCCAGTTTCTTTCAAAGAATAATATCACTCACAGTTGCACACATGTCACATGAAGCCCCAACCTAGATGCCT
AATTAACTTAGCTCAAACCTCAATTTTTTGGACAAAAGGCTCCTTATTCTTATAAAAGCTTTCTCCTCTTTCTTTGA
CTCTTCTCTTATGTCAGCTCAGAGAGACATTTCTGCTTGGGCCAATCTGGCCTTCAAGCTCAGTCCCTTCAATGAATAA
AACAAAACAAAACAAGTCGGGATTTGTACCTTCAGTAACCTTATTGACGATTGGGAGAAAGGGAAAATGCACGGGTTG
GAGTTACCTTTTAGACCAAGCTGACTCCTTTCTCTTATATGCACACACACACACACACACATCTTCAATAACC
TTATTGATGATTGGGAGAAAGGAAAAATGTACAAATTGGAGTTACCTTTTAGACCAAGCTGACTCCTTTCTCTTACACA
CACATACACACACACACACACACACATCTCTCTCTCTCTCTCACTCTTTTCATGCCCTTACATACATGCACACACAG
AGACCAAGCTGACTCCTTTCTCTTACACACACACACATGCATGTGCACAAACACACATTCTCTCGCTCTCTCATGCGCT
TACACACATGCACACACATACATATTCCTCTCTAGCAACTGGCATATTCCTCCCTTTCTCTGTGTAGATGAGGCACAG
ATTAGTTCCACCCAAACCAAGCTCTTCAAAGTCTCACCTTCTGTCTATAAATAGCTTTATCGAACATTTTAATGCAGGC
AGACTCTCGTGAAAGAAATCTGGTGAATTCCATTGTTTTTTTTCTCCATCTTATTACAGTATGATTAATAAGTTAGTGA
CTACAAGGTTGTAGTTTTTAAGAGCAAGAAGTCCACTCCCTTTCAAGTCACATTGGGCAGTCTTTCTGTTTCATACCTGA
CATATTGTGGGAACATATGTCTGCGTAGGATTTTAATACAGAGATTGTCTTAGATAAGAATAATCGTCAGAGAAGCAAA
TGGTCTATAAGTTATTTAATTTTATTCTTAATATGGTCAAAGATAATGGTTGCACTGACTTCAACTTTACTTTCTTMAA
TTCCATTAATTGCATAGCAGTAGAATTTCCATATAAAATAAAATCAGATCCCATGTGCACACAGTACTCTGAGTCACTC
TGTGACTCTACTCTTTGAAGATAGTCTCTACCTGCAGATGCCTGCATGGCCAGTCTTTGAGATGGCCAGTGGCTGAG
GATTTCTCAGATTTCTCCAGAATCTGTTCCCTTAAGCAAGGCCCTACTCATGGTTATTTCTTTTTTGACACACACATCT
TTTTTTTTTTTTTTTTTTTTTTTTTGGAGACAGAGTTTTTATGCTCTTGTTGCCAGGCTGGAGTGCAATGGCGCAACCTCT
GCTCACTGCAACCTCTATCTCCAGGTTCAAGCGATTCTCTGCTCAGCCTCCCAAGTAGCTGGGAATATAGGCATGT
GCCACCAAGCCCGACTAATTTTGTATTTTAGTAGAGACAGGGTTTTCTCCATGTGGATCAGGCTGGTCTTGAACCTCCG
ACCTCAGGTGATCCACCCACCTCGGCCTCCCAAGTGCTGGGATTACAGGCGTGAGCCACCACGCTGGCCGACACAGA
CATCTTGTTTCATCATAGGTCTGTGTGCTTGCTCATCTTTTCTCTTAAAAATCCTTCCCACTCTCTTTTATTTTCATTCTT
GAGGACTCAGCCTTTTCCCACTCCACCTCTGTCCCTGTCTGATTAAATAGTCTCTTTTACTGTCCCATAGCCACAT
GCTTCTCTCTGTGAGAGTGCCTCTACAGTTGTTTGCTGAAATTACCTCCTCTGCTGGACTCTGGGTAAGGGACACACT
CTTTTCATCATCTTGTTTCTGCAGCCTCTAATAAAGTGCATGGCACATAGTCAGTGCTAAATAAATGTTGAGTTACTGG
TGGGACTAAAAGTCAATGAAAGCCAACCTCATGTTTATTTTCATATAAAAAATTCTACTAGAGGCATAGGCAACATTCCGA
AAAACAATTGTAGTTAGTGAGAAGATAAAAGAAAAAGAAAACCGTCACAAAATTGCACACATCTTCTTTTGAAGCTT
TATGAAGTACTAAATAAAGTTTTATATATTTTATACAATTTTAAAAATACTTCAAAAACAATAATTTGATGCCAGAAATAC
ACTTGGAGATGAGAGCAGCTTGCCACTAGCAAACTCTGCTTAAACCTATTACATGTACACATTGAAAGAGAATCCAAAG
CCTTCATGTATTTCCCATCAGATAAAATGTATAGAGGAAAAAAATTAAGTCAGCAAAAGTTAGACCTAACCTACACAA
ATCTTTTACTGTAGCAAACTAAAGGAATGACTAGCTCAAAGCAATACACGGTGAAACAGAAATCATTTTTTCCAGTTCT
ATCTACTGTAGACAGTATCAATTCCTTCKTAGAACAAAGGGGAAATTTTGTAAGAATTAAGAGAAGAGAAGCTGGAAC
TGGTTAGGGAGATTTAAGTATTGCTCTTAGGAGCTTTTGTGTGTAGTTCTTTTATTTTAAAAAATCTGGATCAGTGC
TCATCATGACTGGCCATCAGAGAAATGCAAAATCAAAACCAATAGATACCATCTCACACCAGTTAGAATGGCAATCA
TTAAAAAGTCAGGAACAACAGGTGCTGGAGAGGATGTGAAGAAATAGGAACACTTTTACACTGTTGGTGGGACTGTAA
ACTAGTTCAACCAATTGTGGAAGACAGTGTGGCGATTCTCAAGGGTCTAGAACTAGAAATACCATTTGACCCAGCCATC
CCATTACTGGGTATATACCCAAAGGATTATAAATCATGCTGCTATAAAGACACATGCACACGATGTTTATTGTGGCAC
TATTCACAATAGCAAAGACTTGAACCAACCCAAATGTCCATCAATGATAGACTGGATTAAAGAAAATGTGGCACATATA
CACCATGGAATACATATGCAGCCATRAAAAAGGATGAGTTTATGTCTTTGTAGGAACATGGATGAAATTGGAACCATC
ATTCTCAGCAAACATACAAAGGACAAAAAACCAATACCGCATGTTCTCACTCATAGGTGGGAATTGAACAATGMGAA
CACATGGACATAGGAAGGGGAACATCACACACCGGGGCTGCTGTGGGGTGGGGGAAGGGGGAGGGATAGCATTAGGA
GATATACCTAATGTAAATGAGGAGTTAATGGGTGCAGCACACCAACATGGCACATGTATACATATGAACTAACCTGCA
CATTGTGCACATGTACCCTAGAACTTAAAGTGTAAATAAAAAAAATCTGGATCAGTTGTTATAATTTTTTTTTGTTTT
TTTGAGTCCGAGTCTTCTGCTGTTGTCCAGGTTGGAGTGCAGTGGCCCAATCTCAGCTTACTGCAACCTCTGCCTGCCG
GGTTCACGCCATTCTCTGCTCAGCCTCCCGAGTAGCTGGGACTACAGGCGCCCGCCACCATGCACGGCTAGTATTTT
GTATTTTGTAGTAGGCCAAGGTTTCACTGTGTTAGCCAGGATGGTCTTGATCTCTTGACTTCATGATCTGCCCGCCTTG
GCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGTGCCCGACCTCAGCTGTATAATTTGTATTTTTTTTTTAA
TTAAGGGCATACAAATAGTGTCCAAATAAGTGGTATTTTTTGGACTTGTCTCTTCATGTATACCAATAGGTCTATCT
AGGAATTATGACAAGCCGATACAGTCCCTTTAGCAGACCTTCAAGTGTGGCAAAGAACTAATGTCCACATAGTTACAC
ATCCCGTACAGTGGATCCTTTTACCCTCAATGGTCAACATCACTGTGAGTTGTGGGTAAAGAGTAATGGACTGAACATTT
ACAAAAATGACCTCAACCTTAGCTAACTGCTGTGGCTCTGAGGTGATTACTTTTTTCTTTTTTCAAAGGAAGCTGC
TTCTTCAGCATCTTCTCTGGAGCCCTTGGCAGAGTTTTCAGGCCATGTGTGAGGGGAACCTCTAAGCATATCACTGTGA
CAGAAGCCAAGTGCTGGCCCGCAAGAAATTGAGGACTGTTTGTTCACAGAAGAGCCTCAGCAGAATGCGGGTGTACATA
GTTCAAAGGTGCCCTTGAAGAAAATGATGCTGTTGTAGCAGGGGCCCTTCAAGGCTCAATTTATTTCTCAGTTGCTGTT
CATAGCCCTCTCCAGCCTTTAGGGAGTTTAGCCAATAGTTTTTGTGCTGGGTGTTTTTCTCTGTTTGTCTTCACTT

341/375

AGCAAGATTTGGTGCAGTTAAAGAGTTTTCATGTATTTTAAAGGAGAGCCACAGTGTATACTACTCTGGCAGGGGTTGA
GGGGAAGTATTTTATTAATGAATGCAGTATGTGTTCTTGGTAAAAGCCAAAATTAACTGGCTCACTGTTTTTGTCTCTG
CTAGCTGTCGACATTTAGGTGTGTTGCTTGGTGTGGTGAAGTCAATTTCTGTGGGATAGTTGGCAACTCCACTTTGAGG
TTTGTTCGGCGGGATGAAAAGGTCAAGTACTTGTATGCTTTAGAACACTTGGGGTTAAAATTCTTAAAGTGAAGCTTTA
CAAATGATCCTGAAAAATCGTGGCTAGCTATATTGCCTACTCACCTAGGAATTTGGAAAAAGCAATATTCTCAGCTCT
ATGCTAATATCAAGAATAATTTCTTTATTTGAGCAACAGTTTTCACAGAGCAAACCTTACTCTGTTAGTAATTTTCTC
ACTAGCATGTAGATGTGTTCCAGTGATTTTTTCATTTTTCTTATTTATACAGATGTTAGAAGTTAAAATATATGCTTACC
CCATTTTATCATCATACTCAAATCCTGTCTGTCAAAGTGGCTGGTGCATGGCTTGGACATAAAATGGATATTCTGAAG
TAAATTTGTTCCCTCTGTCACTATACTACCTTCTTAAAGAACAAATCCTGTGTATAAAAGTGCATGATGTCTTGAAGCATT
GCCAAAACCTTTCTGTAATTTTCCACATTAAAAATAACAAGTGAATATAATGTGTGGAGCCACATCCTGTTAGAT
TTGAAGCCTGAGTCTGAAMAGCTTTGGGAACCTGGTGAAGATGGAGGAAGGGGGCAGTTTACTTAGCTACTGGGAAATC
ACTTGAGGCTCAGGCTTTGAGAAAGTTGGAGTGCAGGGGAGAGGAGCCACAGAAMGCCGAACCTCAGAGGGGACTCCCA
GCTTCATTGTAACCAATGATTGAAAAGATGGCACTGAACAAATCCCAGACACAATGGTTATGCATCTTTAATCCACTGG
ATAGGCTAACTATGGACAGCTCAAATGATCATAAAACAAGTCAATGTCTCTTAAAATTTCTACATTCCTATATTATG
GGAATGAGAGAGAGAGGAAAATATCAAACCAAACCATATAGTAGATGCCTACCATGGCAACTAGGTGATGCTATACT
TGCATATGGAAGTTATTAGTAAAATGAAAATGATTGTGTTAGAGCCATAGGCGAAAGTATTGTTTGTGATCTTTAGGG
TGTTGGGTTACAATGGACTTCTCTATATTTGTGTGTAATGCTTCAATTTTTATAACAAGCATGTAATTTTTTACATTC
TTAGAATTTGGGGAAGCTATACAGAGCAGGTATTTTATATTTACCATTTAAAATTATTAATATCTTTAAGCTTGTTAAGG
GGGAAAAAAAAGCTTCAATCTGAACTTTAATTACCTGGCAAGGTTTAGGCAGTTGTTTGTCCATCTAAAGTATATAT
TTACATAGACTGCGGGGTGGAGGAAGTAGAACAAAAAGAGGCAAATTTTAACTTAGAGTACTCAAAGTGAACAGTAAA
TAGTTCAAGTATCTTTGATAACAATAAGCCAGCTGGGCACATGTAACAACCTACTTTTAAAAGTTACTCTAACTTTTACAA
GTTACATAAAAAGCTATCTCAAAAATCCCAGGAGCCTAAATTCAGTCCATGAACCTTATTTGTTGTGTCATGTTAATT
TATGGAGTCTAAATTTCAAGGGCAGAAATTTCTTCTCAATACCTGTAGATTCAAAGACAAAGACAAGGGATCCCACCAC
CTAGTGTAAGTTTCTCAGTATCTTCTTCCACTCGACAATGACAAAGTTTATCAAATGGACCCTTGGGAGTTTGACTT
TCTCTCACTATGAATGGTTTGTCTTATGTCATGCTAATGTAGAAAAGTTCTCCCACTGATCTGCTTAGGGACAGTGT
CCCTGGTGCCTTGGGTGAGCCTTTGTAAACAGAACAGGCTTTTCTGTATGCCCTTTGAATATGCTTTCCGTTTCTCA
AAATTGTAGTGTACTCTGCACATGGTGGGTAGAAAACCCCTTCCAGATTTTCTTCTTGGCCCAAGATCATCTAGGTCT
TATGCAATTCACAGGGGAAAGGAGTAGTATGCAGGACATGCGTAAATTTCTCCTTACCATGTGTTCTTTTACATTTGCTG
TTCCTTTAAGAGAACTCTTAGGCAATTCGGCATATGAAAATGCAGCCTATTGTCAAATTTGTGAATTATAAAGCGTTCC
GACCCCAACAATTTGTATATTTTGTGTTGCTTGTCTGTCCGCCCCAACATTTAGAAGTCTGGTACTTAGTAGGGACTG
GGCTGGGTAGAAAAAGAAATGCGGTCTTAATTTCCCAACCCCTGCTCCTTGAAGTAGGTGAATCCTAAGCCTTTAGAAA
CGAACCCCCAGAAACCTTAAACCTCAGAAACCTTGAGGGTCTTAAATAACCTTGTGTTGTGAACTTCGCAG
GAAGCAGCCGGTCTGTGGAGTCGAGAGGCTCCAGCGGTCTGGGCAACCTGGAGGGCAGTGGCTCGGCGGGGCGCGCGGT
GGTTCTAGCGAGACAGGTGCGCGGCGGTGCGCGCTGCGTCCGCTCCCTGAGCCCCGCGGCGGGCGCGACCCCGG
ACGGCGGACTGCAGGCGCTCCACGCGGGTTCCTGCGCGCTCTCTAGCACAGACAGTCCCACAGCAGCCCCACAGACA
CACACGCTCGCGCCCCGCGCTCCTCGTCTGCACTTCAAAGCGAGTGGCGCCCCGCTGCGCSGGGGGATGGCACTGCGA
GGTGGCGGGGCCCCGGGGCAGAGCTCGAGGGGAAGGACGCGGCGGGTGGCACGGACAGGGACAGGCTTTTGCATTCG
GAATCTTTTCGTAAGGGGGTTGAGGAGGAGCCAGGCAGCGCGGAGGGCCGAGAGGGGCGTGAGGGGGAGTGTTCCTCGA
AAGCTGCGGCGTTGGAAGCCGCGCTGCGCCTGCGCCCCGAGGAGTTGAGAAAGAAAACAGGAAACGTGGTGGCCGCGCA
CCCCGCGCGGCTGATTCACTTCAAGTGCCGTGCAAGGCTCGGCAGGCGGGGCGGGCGTGGGGCCGCGGCTCC
GGGTGGGGACCGAGGAGATCCGGCTGTGACACAGACGCTCCTCTGCGGGGCGGGCACCCAAGCGCGCTCGCCACCCCC
TCGCCATCCGCTAGAGCCGGGCTCCTGGACTGGGACTCGGGGCCCCGCGCACAGTTGAAAAGTGCATAGTGGTTTTTCC
GCTCGCGTCTGTGTGAAAGTTGGCTCGCGCTCTTTGACAGCCCTCCCTGGAGGCGGACCCGAGACGCGCAAGCTGGA
GAGACCGTGCCTCCCCGAGGCCGGCGCCCCGCGAGCACAGCCTCCGCCCCGTTGCACTGCCGGCTGGGCAATATGA
AGGAGCAGCCCTCATGTGCCGGCACCGGGCATCCGAGCATGGCGGGGTATGGCAGGATGGCCCCCTTTGAAGTCTGCTAG
CGGACCCGTGAAGCGCTTGAGAACTGAGTCCCCCTTTCCCTGTCTCTTTCGAGAGGAGGCTACCAGAACTGGCCAGC
GAGACCTGGAGGAGCTGGACTGGTGTCTGGACAGCTAGAGACCTACAGACCAGGCACTCCGTCAGTGAGATGGCCT
CCAACAAGGTAAGCCCCGGTTCTGTGTCACTGGTGCCCCAGGCTGTGATTCCCATGCGGCGAGCCACTGGTACCC
ATAGCCCCGGGAAATAAATTGAGAGGTTTTTTAGGCTTACTGCATGTTGGCTATTCTGCTCCTTAGAGGGAGGTTCTG
TTTCCTTGCTTTGCTTCCCTAGTCAGCCAGATAAACATTTTCCAAAAGCAATTTGACGTGCTAAATTTAAGTATCTC
CCAAGACACAGGGTTCTAAGTAACACTGAGCCCTTGACAGAGAAACCCAGTAGGGTCCATGGGCATTGCATGTTAAA
GGTGTCTTTGGGATTCCCGGTTGAAAATAAGAATTGGTGGATGTCTGTGAAATCACTTGAATGTCACCACCTAGGGCAC
TCAAACCTCAGAAGAGTTTCATCGAACTTGAACCTTCAACCTAATTCATCTAGTTGTGAGGGTACCCCGCAAGAAGTGA
CCTTTATATATTAGTTGGCCATACATATCCGAGGAAACATTAAACAGAGTTAGAAGGTTCTTATGATCATTACTTTT
GTTTCCATTAATCTTGGAAAGAAAGCCAGTTTTTTGAGGTCATTTAGTACAAGGAGGCTTCAACTAGGCATCTGTGCC
ATATGTGCTAAGGTGCTGGTCTTGGCAGTTAATGGAGTTTTGAGGGCTGAGAAGTAACCTTCAGCCTGGGACAGCCTTA
AAATAGCACGGAAGGCAAGGTATAGTGTTTTCAAGTTTTGCTGTATTTTTTGGATTTCTGTTCTTTTTGTCTTTAGTTA
TGCAAGGAGATAATTGGAATTGTGTATGTTTTTAGTGGCTATTTGCCTGTGCATGTGCTATGCAGATGGCTGAAGGATT
CAGCCAGTAAGGACTGGTAATGTTGTGAGACAATTAGTAATAGTTGCCTCGTCAAGATATTTAAGTATTTTTGGCCACC
TATTTACAAGGTCAAGAAGTTATATTATCTTACAGTTTATCTATGTGCACATATCTTTAAATGAGTGATGCTTTTTTT

342/375

TTTTCTACCTTTCTATGGTTTTATCCCACCTGTTCTCATGCAGTTTTTACAAAAAGGCCACGGCATAACAGCCACTTG
 ATTGTCTTATCTATTAAACAGTGCTTTTGTAGGTAGCATTTGTCAAGTGAAAAAGTTGGCTTCAAATAAAATAAAGGGGCTC
 TGTAGACACGGCCAGCAGATACTAACCTACCCATATGCACACTGACCTACCCATGTCCACACTGATGATCAATTTTTTT
 GTCATTTGTGCCTCATTTCTAAATTTGGCACAGCTCCTCATCAGAATGACCAATTATTGCTCTTACTGGGACTTTTA
 CCCCCTGCTGTRGCATTAGGCACCTTTATTCTCATCTGAGTAACAAATTTCTAGTTTTATAAAAATATAGTTTGTTTTCA
 TAATTTGATTCTCAATAGCAGTAGACATATGCTGAATATGTCCAGTGTCTAACTGCTAAATGGGAGCACTTTGCCATG
 GGCCTGAGTTCTTAATTTCTATTGTGTGGTTGATTCTGTGTAAGAAAATGAAGAGCAGAATCAAAAGCCACTTAGCAATG
 TGCAAGCATTAGTGATRTTTTTCAAGGTGATTGACAGTAGTTTTTTCAGCTAAATGAATTTGAGCAGCTAGTTACTTTTC
 CCTAAAATCCATATTCTTAATGTTGAGATCTATGTTTGGATTTAAAACTGAATGTGAAATTTAATAATGTATTGTAAAT
 GACTTCAGCTGTCAAGGAATTAATCTATACGTTAAGATTTAAAAATTTTTTAGGTCATAATAATTGCCATAAATGATTCT
 CTTTCTTTTTAAAGGCCACCAGATAAGACAGGGATTTAAAAAATAATCTTTATTATGAAGGCCCCAGATTAGACTTTGAG
 TTAATTTACAGGTTTAAATAGGAGAGGTTGGTCTGTTTGGTTAAAATGAAATCTAGGTAAAGTGAGAAGATAATTTTTTC
 AAAATGTAGTCATTCTAGCAATGTTTATGTCTTGTGGCTGAAAAATTAGGATATTTTTTCTAGCCACGACAGAGCTG
 AATTGAAAAATTATTGCTGTCACTAATTTTTTAACATTAAACTTAGCTCAGCTTAAGCTGTTGCTTAAACTTTTAATG
 TCCAAGCCATTGCTGCTCTTTAACTTATTTATTTCTAAATCAGTGCTAAGCTTACATGACTGTTATAGACAAAAAAG
 GGTTAGCACAGAAAGAAAAAAGCTCTTGCTAAAGGTTGTAAAGTTACCTTCTTCTTACATAACAAGGGCATGAATAA
 GCCACATCCACAAAAGCTGTAACTGAGTTGGAGCAGCTGATCGGAAGGCCCTGTGAGTGTTGCCACACCTTCAGTCT
 GAACTGGAAATGTGTACAGCTTGCATCATCTCCACTCAGTTATTTGATATTTCTTGAGTATGAATGAATGAGTCAGAAA
 CATTGCTTTTCAGTTGTAGTTTTATTACCATCCATTCTTTTACATACACGTGTTCAAACCTGATATTTTCAGTTTATT
 CTCCTTTAGCCTTTGAAAAATTATGACAGTTTTCTGTGTTCTCTCTTGAGGTTTTAAAAAATTTACTCTAATAGATTGA
 AAAGCACATAAAAAACACTAGTAAGAGATCAGGATTTTTAAATGGTGATAGAGAATACTTATTATGGAGATGGATTTAG
 GTATTAGGAAGGAGGAAACTGATTCCTCAAACCCATTTAACAACTGGGTTAACAAEATTATTTCTGTTTCTTAGACTTC
 TCAATAAAAAGGCATCTTAGCCAATTAGCAGCTTTTAAATGATGCTCTAGGAGCAACTAGCTGATTTCTGTTATTTGGTA
 TTATATATGTTTCTTGCTTGTGATGGCATTGAAGCAGGAAAATTATTGAATTTCTGGCCAAGGCTAGGTTGGCTGTA
 ACACATGTAGGATGCTTGTACCAAGTAGGGTAAGAGATTCCAGATGGCATTTAATTTGAGTGATTAAATCTATGGCATT
 TACCCTTATAAGCACATTAATCTGCCTGAGATTTGTACAGATTTCTTTTGGAACCTCATGCTACAATTGAGGGTAATT
 TTAGTGAGGTCTCAAAGCTTTGGAGGCAGGCAAACCTGGAAGTTGAATTATGGTTTTGTTTCTTGCTAATGGAGTTACA
 TTAGAGAAAATGACTTCAATTTTTTTTAGCTTCAGTTTCTTTAGCATACAATGGGCACCATAATACTATCTTGAAAAGT
 CAGTGTAAGAGTTCAAAGAAATATATACAAAAGAGCTAGCTAATATAGTATCTGACAATAGTAGGCACGTATCTGTTG
 TTATTGCTATTATTTGGGTTTTAGGTCAAACCTTCATTGGTTGCCCTACGTGGCTAAAATGTCTTTTTACCATTCCGTTGT
 AATTTATACCAGACACTTCAAGTTTGTATGGAATTTTATAATTCTTAGATAACTGTCTATAGCRCACATTTCTGTATCAT
 AAAAATGCTTAAATTTATTTTACAGTTTTTGTGGTATAATACAGACATGAACATTTCTGAAGTTCTAATTAGAAGTTTAG
 GCTTTTCTTAAATTCAGTTACAGAATGCCAGACAGAAGAGCTAACTAAGTACTTTTCTGTTTTACTCTAAAACCTGAA
 AATGCAGACCTTACTAATTTTTTAGAACATGTGAAATGTAATAAGGGTTAGTGGTCAATGTGCCTTTTTCAGTAAAACACC
 TTTTAAGCAGAATAGTTTACCATGTTTTTGGTTACCTTTCTCTCATGGAAAGTATATTGAGGATGGGAGTCAGTAGAG
 AGGAGAGCAGGACAGCGCCTGGGCCTCAGGGCTTTCAAGGATTATGCTATGGAACCTGTAACTTATCCTCTTGTGA
 CCTAATAATGACATATTTACCAGGCCTTCCCTGTAAGTTCAAGTGGGTTCAAAGGAGAAAACGAAATCATTTTGGAGTTA
 TTCCCAAGACATATCATATAAAAAATGATTTTGTGTTCTGACTAATTTTGGGGGCAGTTTGGAGTTTGGCATGGCTGG
 AAATGACTGTGTTTTCAAGCTGAAAGTCTGTCTGGAAGTTGAGATCCAGACCCTTTCTAAGAGACTTCAGATTTTTCTAT
 ACTTCATTCCAAATATACTTAGGCCAGCTTTACAAATGTGGTCAGACTTCTTTATGGAATTTATTTGTGTATTTGGC
 TTTTGGCAAACCTCTCTAGCATGTTTCTGTTGCCTATAAATTAATTTGCTTTGCTGGGTGCTTTGTCTCAGAGCTTTCT
 CTGGCTGCTCCCCCTACTGCTTTGTAATAGTCAATGCAGAACATATAGTAGGACTTTTTGTTGATGATTTTCTTCTGG
 GCAAGAGGGGTGTTATAACAAATATAGGATCTTCATAGAAGTGGCTAAATCTTAAGATATTTCCACATTATGCAACTAC
 AGTGTAACCTCAACAGATATAAATGTTAACTTTTGCTAAGAAGGAACTAAGTTAATTGGAAAAGGCATGTTAGTTTTA
 TAGAGAGAAAACAGCCTCAGTTGTTTTCTACATTAACATATTAAATCTTAGATTAAAAAAGTGTTAATATGCCTAAATA
 CAAACTTTAAATTTCAAAGAAATATCTTCTATAATTATAGAAAATCAACATTTAGATGTTTTGAGTTGATATCTGC
 TTTTTCATCTACTCAATAAAGGTAGATTTGGGAAAGATTTATGTAGCTTACATGTAGTACCTTAAAGTTAATATGAAAG
 ATTGAGAATCCTATAATCACTGTTAGAAAAAATACTTTCTTTGCTTTTAAAGTAATAATGGAAGAGGGAACAATTTTAA
 AGGAAATTTTTCTTTCACTGAAAAGTAGAGCCCTTGATGTTACCTTAGCATAAAACCTTAGGATTAAAACAAATCTTAAC
 TTGTCTCTGTTGTATCCGTTTCAGTTTCTGTGCCAGTATTTAGTGAAAGTTAATTATTCCCAACATTTAATTATCAAA
 AACTCCTAATTTTTAATTATTCAATAAATTAATCATTACTAGATAAATTTCTTTTTTTTTCAGTTACATTTTGACTTAATA
 TTTGGGGTAGTAGTGGAACCTTCTGTCTGAGAGCATTATGAACTGTCTACGTTTTTCGAAAAAATTTCCGAAACATAAGG
 ATTGCCCATGATAAAAAGAAGTATTTTTCTAATGTTATGGGTAGATTAAACAACTGGTATTTTTCTAGAGAGAAAGGA
 TGATAGATAATGCTTTTGTTCAGTTTAAAGAAGATTTCTGCGATAGTTACATAGACTGTAGCTATCACTTAAGATATAAA
 TACATGATGGATGTGCAGTGCTGTTTATGTCAATTTTTTTCAGTGGATTACAAAAATATGTAGGGTTTGGTTTTCTCTTT
 TTCAGCAGGAGGGACCACTTTTTCTAGAAGCTGTAGATTGCTGGGGTTAATTTTGTGATAGCGTAGCTCTAGTAGGG
 GAGCAGTTTTTACATGGCTATTTTGTGTAATAGTTAATTGACACTGTTAGTCTGAGATCTTTCTAGAATGTAGAGAGA
 TCAGTAGCACTTTATTTTAAATATTACATTAGTTTTTGAAGGCACTTTGAAGAAGACTTTTTTATTCCCTGTAACAGGG
 ATTGGGGGGTATGCCTTGATATTTGCTTAAACAACAACAATTTCTGCTGCGTCCATTAGGAAATTAGTTAAGTTTCAGTG
 ACCAATACAATGACAATAGGTTTATTATCTTTTACTCTTAGAGAATAGTTTATCTTTTATAAAGTATTTATTATTATT

343/375

ATTTAGTATTTCAGAGCTTCTTGTGTTTTGTTTTGTTTATACTTTGTATGTGATAAGGATGAATGATATTTACTCCCTGGCC
TGGAGTAGGCACCAGTGATACTTACAGCAGCTTTGTACAGTGAAGAAACATAAATGTTTTTCATTAGGCAAACCTTGGT
TTCAAATTCAGCTCTGTTGTTTCTATCTAATATTTTGGGCAATAGGCCTTACCGCTCTGGAGCTCAGTTTTTTCATT
TATAAGTGGCGGATAGTAAAGGGGAAAATAAAATGAAAAAGTTATTGAGACCATTAGCTATAATGTATGTAAAGCTCCG
TTTGGTGCATTAGCACACACTGGGTGCTCAATAAATTGCATGTGCTTGCCTGTCTAGAATATACTAAAAAGAGAGATT
AAGAAAACTCTGTGTACATATTTCTTGCAATGTAAAAACATAATTTCTTAGAAGAAAAACATGACTTTTCTATTC
TTTAAGAATTTACAGTCCAAATTAATGTTGCTCAAACCTTTGTCAATTTTGGAGACAGAGTCTCGCTCTGTGCGCAGGCTG
GAGTACAGTGATACGATCTCAGCTCAGTGAACCTCCGCTCCCAAGTTCAAGCAATTCTCCTGCCTCAGCCTCCCGAG
TAGCTGGACTACAGGCGCATGCCACCATGCCAGCTAATTTTTGTATTTTGGAGTAGAGATGGGGTTTACCATGTTGGC
CAGGATGGTCTCGATCTCTTGACCTCGTGATCCTCCCTCCTCGGCCTCCCAAGTGTCTGGGATTTTGTCAATTTCTGTGT
ACATTCATATCTGCTATTATATGTGTTGAATGTTTTAACTTAATGTATTTTTTATTAATCTTTAAAATTTATTTTCAATT
ATTCTTAATTGACAAATATTAATTGTATCTATTTCTTGGGTATAATGTGATTTTTTAAAATGTGTACATCATAGAAAGAT
TTAGTAAAGCTAATTAACATATCTATATTACCTCACCAATTTATCTTTTTGTGATGAGAATGTCAAAAATCTATTTTAG
AAATTGTAAAACATATAATACGTTATTAATTACTGGGGTCTCCATGCAGTGCAATAGATCACTAAAACCTATTCTCTCA
ATCTAAGTAAATTTTGTACTGTTTGTGATCGACATCTCCATTTCTCTCTCCCTCCTCTACAGCCTCTGGTAACCCA
CCTTTCTACTCTCTGTTTCTGAGATCGACTTTTCTAGATTTCCCATAAAGTGAGATCATTTATTAAAGACAATATTTGT
CTTTCTGTGCCTGACTTATCTCACTTAGCATAATGTCTGTAGTTCCATTCCATGATGTTGTGAATGACAGAATTTCTT
TCTTTTATAAGGCTGTGTAATCTTTCTTTTTTTTTTTTTTTTTTTTTTTTTTGGAGTGGAGTCTCGCTTTGTAGCCCAGG
CTGGAGTGCAGTGGTGTGATCTCGGCTCACTGCAAGCTCCGCTCCCAAGTTTCCATGCCATTCTCCTGCCTCAGCCTCCT
GAGTAGCTGGGACTACAGGCGCCCGCTACCACGCCCACTAATTTTTTGTATTTTAAAGTAGAGATGGGGTTTACTAT
GTTAGCCAGGATGGTCTCGATCTCTGACCTTGTGATCKGCGCGCTCGGCCTCCCAAGTGTCTGGGATTACAGATCTG
AGCCACTGCGCCCGGCTGTATAATCTAT
TCACATTTTCTTTATGCACACTTGATGAACACTTAGATTGCTTCCATATCTTGGCTGTTGTAAATAAAGCTGAAATGAA
TATGGGAGTGCATAATCTTTTTGTATGTTGAGGAACCTTCACTACTATTTTCAATAATGGTGGTTCTAATTTACATTCCCACC
TATGGTAGTTCTATTTTTTAGATTTTTTGGAGAACCTTCACTACTATTTTATCATCTGTTTGAACATAGCCATTGT
AACAGTGTAGAAGGGCTCCCTTTTCTCCACATCTTGCACACACTTGTATCATCTGTTTGAACATAGCCATTGT
ACATGGTGGAGAGCAACACATACCTGGGTCTGTTGGCGGGTGGGATGGGTGCAGGGAGAGCATCAGGAAGAATGGCTAG
TGGATGCTGGGCTTAGTGCTTAGGTGATGGGATGATACGTGAAGCAACATGGCACATGTTTACCCTATGTAACAAACCT
GCACATCCTGCACATCTGCACATGTACCCCTGAACCTTAAAGTTGAAGAGAAAAAAGGAAAATAGTCATTCTAACA
GGCATGAGGTGATAGCTCATTGTGGTTTTAATTGCATTTCCCTGAGAAATTAGAGATATTGTTGAGTTTTCGTTTTGTTTT
TGAGACAGGGTCTTGCTCTTTTGTTCAGGCTGGAGTGCAGTGGCGTGATCATGTCTCACTGTAACCTCAAATCTCGGG
CTCAATGATCCTGCCTCAGCCTCCCAAGTAGCCAGGACTACAGGTGTGTGCCACCATACCTGGCTTTTTTATTTTTTCGT
ATAGAGAGGGTCTTGCTATTTTGGCCAGGCTTGTCTAGAATTCCTGGCCTCAAGTGATCTCCTGCCTCAGCCTCCCAA
GCACTGGGATTCRGGCATGAGCCACTGTGCAGGGCTGGGGAACATTGTTTTTTTTTTTTTTTTTTTTTTTTTGTATCT
CTGTTGGCCATTCAATTTCTTTTTTGGAGAAAGTGTGTCTATTTCAGATCCCTTGTCTAATTTTAATCGATTTGTTTTCT
TTACTATTTGGTTGTTTGAATTTTTTATATATTTTGAATATTAGCCTCTTATCAGATGTATGGTTTGCAGATATTTTCT
CCTGATCCATGGGTGTCTTTTCACTCTATTATTGTTGCTTGTGTCAGGTACTTTTTAGTTTAAATGTAGTCCATTATTG
TCTATTTTGTTTTAGTTGCTGTGCTTTTGGAGTCCATCCAAGAAATCATTGCCAGACCATTGTTGTGGAGATTTT
CCCTATATTTTCTTCTAGTAGCTTTACAGTTTCAGGTCTTATGTTTAAAGCCTTTATATCTCTTTTGGAGTTGATTTTA
TATGGAGTGTGAGATAAGAGTACAGTTTCTTCTTCTGCAGGTGGACATCCAGTTTCCCAACACTATTTGAAGAGACT
GTCTCTCTCCATGTGTGTTCTTGGACCCCTTGTCAAAAATCAATTGACTGTAAATACTTGGATTTACTTCTGGGCTT
TCTATCCTGTTCCATTGTTGATGTTGTTTATGTTTCAATGCTGTTTCAAGATTGCTTTGGCTATTAGGTCTTTTTTGGTT
TTGAAATGAGGGAATATGATGCCTGCAGCTTTGTTGTTTGTGTTTCAAGATTGCTTTGGCTATTAGGTCTTTTTTGGTT
CATATAAATTTTAAAGATTTTTTCTCTATTTCTGTGAAAAAAGACATTTGAAATTTTGAAGGAATTGCATTGAAT
CAATAGAGGAACCTGCATTGAATCTATAGATGGCTTTGGATAGTGTGGACATTTTAAACATTACTAATCTTTTCAGTGCAT
GAACATGGGATATCTTTTCAATTTATTTCTGTCTTCTTCAGTTGTTTAAATCAATGTCTTGTAGTTTCCAGTGTATAGAT
CTTTCACCTTGTGTTGTTAGATTTGCTCCTAAGTTTTTGTTTTTTTTTTTTTTTTTTGTGATGGAGTCTCGCTCTGTTGCC
CAGGCTAGAGTGCAGTGGCGCGATCTCGGCTTACTGCAAGCTCCACCTCCAGGTTACAGCCGTTCTCCTGCCTCAGCC
TCCCAATTAGCTGGGACTACAGGCGCCTGCCACCACACCTGCCTTTTTTTTTTTTTTGTATTTTAAAGTAGAGAYGGGGT
TTCACTGTGTTAGCCAGGATGGTCTCGATCTCCTGACCTCATGATCTGCCCGCTCGGCTCCCAAGTGTCTGGGATTA
CAGGAGTGAGCCACCACGCTGGCTGCTCCTAAGTATTTTTTGTATGCTATTGCAAATGGGATTATTTTCTTAATTTCT
TTTTTGGATAATTTATTGTCAAAGTATAGAAATGCTAAGAGCAACTTATTGTTAAATCTAAATACTACCCAAGTGCCT
CATCTTAAGTAATGGTATACATGAAATCATAGGTTTGTATGTTCAAGTTATATTTTTTCTGTATTTTTTCTAAAATTAAT
GAATAACAAAATGAGAAAAATTCATCTTGCACCACCTTAAAGCATTTTGCCTACCATTACTAACACTGGGCATACTT
TTGGACACACTAGTCTAAATCAGCTGCAAGAACATTTAGAGACTAATTTATTGTTTTTAAACAATCAACATTTTCTCT
CTTTACCCTCAGTTGGATTTCTCCACTAGAGGAGAAAATGGCAAATTCGTTTCAGCAGAAATATTTCAATTCATAAAATA
TTCATTCTTTAGGCAGAATGGTCCGTGGATTTAGAGCACCCTACTATAGACAGCCTGCCTGAATTGGATTCAATCTCTG
CCTTTTACCAAACGTAAATTTGGGCCAYGTTGCTTCTGTGCTTCAGTTTTCTCATCTGTTAAATAGTTGCTGTGGTGAT
TTAATGAATTAAGATGGGAATTTGCTCGACTGAGTCAGGAATCATACTAGATACTCAGTAGAACTCATTCAATTTCCA
TATGTGAAGGAATAACATTAGTTTTTATTTTATTATTTTGGGGGTGAGGGTTAGAGAAGGGTGTCTGCCATCCTGATT

344/375

TCTATCCTTTTGTATAAAGTGACCTAATAATATTGATACTAACCAGGAGGACTATTATAATGTTTTATTTACTCTTCTC
CCCCATTAATCACTTTTTTTGGTGGTGTTTTATATGTTTTATTCCTTTATTTTCATCCTTCAAGGAGTTTGGCCCTTTGT
TTCCTTCTGTAATTTTACAGTATAGCTCATCAAGCAAGCCTGAGATTTTGTGCAAAATATCTGAAAATCTCTGAGCTTT
TTCCTAGCAGAAATGCATAATGCAGTGCAGAGAAGATAGTCTAGCCAGTGTTTTTCATAAATGAATGTACATACGTTCTTC
CTCTGCATAAAGACTGAAAGTAACCCAGGCACACAATATCTTATTAATATTTAATATTAAGAAAAGTATATTAAGAAGGT
AACTCTCCATTCTACCTCTCAACATCTTACCATCTAGTATACACACAAATATTTCCCTTGCTTATCAGCCGAGAGGGTCT
TAGAAGCTACCATACCCAGTAGCAATGAGCACACTTAGCACCCCTCATTTTGGTCTTCTAATACCATTCTCTGGTAAAAG
GAACCAAGACTCTTTGAAAAAAATAGCTGATTTCTAGGGACTCAGGAAGGAAAATATGTAAGATGAGCCTGGAGCATCT
TGTAAGTGCCAAAAAGTAAGGACCTGCTCAAAACAAATGGAACCTACACCCGTGGGAATATACTGAAGAGTTGCAAGAGC
AACTGAAAGAGCTCCCAATGGCCAAAGCTAGAACAATTTGAGCAAGAAAATAATATAGTATTGGATTATATCCCAAAG
GGTAAAATAAATATCCATAAACCCATATTGATACAATTTATTAATAAATACCTAAGTGGGGGAAAAATAGACAAATCTC
CTCCTGTGCGGAATTCCCAATAACTTCTATAGATACTCTACTCTCAAGGAGGGAGAACATAACCCCTACACCGTAAGT
GTGAGCTGTGCATATTGACTTCTTCTAAACAGTACAGTGTAGAAAGGGAAAAAAGAACTGTAGTGGAGAAWCCTA
TCACTACTTCAGCCAGGTTATCAAGGTCAACATTGACAGTGATAAGTGATAACATGTACCCTCGATATGATCTGATGAA
AATGGCACTTTTAATCTGTGGTTTTCCCTACTGAAAACATATAACCCAGTGTAATCATGAGGCAAAATACCAGACAGATC
TCAGTTGAGGGATATTCTACCCTCGAAACTTGACCAGTATTGACCAGTACTCCTCAAACTGTCAAGGTTATCAAAAA
CAAGGAAAACCTGAGATACCTACAGCCAAGAAGAGCCTCAGGAGACATGAGGACTAAATATTATGTGGTATCCTGGATG
GGATCCAGAACAGAAAAAAGGAAATTACGTGAAAACTAAGGAAATCTGAATGAAGTGTGGACTTTGTTTAATAATAATG
TATCAGTATTGGTTCAATAATTGTGACAAATGTGCCATACTAAAGTCAGACATTAATAAATGGGAAAACAGTGTAGAGTAT
ATAGGAATTATCTGTAATGTCTACACAAGTTTTCTGTAAATCTAGATCTGTTCTAAAAAAGGTTTTATTTAAAAAG
TCGAAGCCATCTTTAAGGCCTATCTGGAATGTTACATCCTTTATAAAGCCTTTTTTTTTTAATCCCATCTTCTTCCCAT
CCTATATCTGGGGTGTCTATGTCTCCACCTCAGGCTTTCCTAATTGGATACCTTTGACTTTCCACAGAACTTTTATT
TGTAATTTCTCTTAACCTTAGTACAATATTTTGTGTCTCTGTTTTATTGTTCTGATGAGGTCTTCTACGGTGTTTTTAG
CCCAACCCAGTGAAGTGTCTGGTGCCCTTAGACCACCTTGCCATCCTGCACCCCTACACAGTGAGTGTCAATATAACATTT
TGTAAGTTAGTACATAAATTAGTACAAGAATGCATGATGTTGGTTAATGCAAAATGCTGTTTTTACCTTGTATTGGTAG
ATGGAGAGTCTGAGCATTCTACTTTGTGCCTTTCAAGAAAGGTTTTTTTCTTTTCTTTTTCAGTGACAGGAATCCTGAGC
ATTTCTCACTTAATCTCAGTTCTGCTTTTAGATACTCATGTCTCAGAAATTTTATCATAGTATATGCTAGATCAATCTC
ATCTCGTTTTAAATTAAGGTTTTGTAGTGACAGGCAAAACCATAGAGGCCATATTCTAGGTCATAAACTGCTCTTTCT
CATCTCTACCTATTTTAGCAATAACATTCTTCTTATTAGTTTTGTTCCAAGTGAAAATGACATAACTGAATACTTTCCCT
GCTAGTCTGGGAAGAAAGGATGTGTTTTGTTGGCTTTTGCTGTGAGAGATATTCTGCAATGTTTGCTAGGGCATGCT
TGCATTCCCATCAGCATCTCTGGTCTGCTGCACTGTAATCCCTATAGGGACAGCCTCTGGCTTTTATTACTGACAAGCA
GTGCACTGTGAGCCATAGGCACCATAATAGGAAACACCTTGCCCTGTGATAAACAGGTCTGGAGAGTAGAAAGTACAG
GCCTGCTGGGGATGTGTCCATAGCAAAGAGGCAAGATGCGGCTGCCATATTGGAGTAAGTGACAGGCTAATGTCTGCCA
TCTCCATTTAGAAAATAACTGGCTGATTTTGAAGCTGCTTTTGTATAAACAGTAGTGTTTTGGTTGCTTTTTGTGTTT
TGGCTTAATATGAATAAAGCCATCTTAAAGAGATTATACCCCTTCAAAGTATTTTGAGAAGATCTATAAAGTATTTTCC
TTTTGTTATTTTACATTTAATTTCTACCTGATCATTCCAATCCAAACCCATAGAGAAGGAAAAACAGATATTTCACTAT
AGTGGGAAATTAGGAAAAAAGAACCATGCAAAAATACAAGTGATTGTGTGCTTTTTAAAGAATTACAAATCACACTG
AATTACCCAAAATTACAAAGAAAAGTGCAATTTATTATTAAGGTAACCTGTGTGTCTGTGCTTTTACATCAACTCCAAG
TTTTATAAAGGAGTACATTTCTTGACCATAAAGACTTTATATTTGTTAGTGTTTTTTCAATCTTTAGGGAAAAAATG
AACTGCAATATTAATGATAGGCTTTGTAGCAAGAATTTAGGAAGACAATAAATTTCAAATTTGGAAGGGTTATCACAGT
TTTTAATAAAGAGATAAAATATTTCATGAGTGTCTTTAAATATATATAGGTGTCTATTTTATTATTACAAGGAAACCCA
TTTCACAAAAGAGGCTAAAGACTGTAAGATTTGAACAAGCTATAATCTGTGTTAAATAAAGTATAGTATAGTTAGGAAAAC
TAAAGTCTTAATTTTTTTTTTTTTTGACCATTGCGCCAGAGCTGTTTCAAAATTAGGTAATCAATRTTTGTTGACTAGTC
CCCTCCCTTGTATAAATTAACACTTGTCTCTTGTATCTTTTTTAAAAAATATTTCAAGTAAGTTTCAACAGTATG
CTGTGATAAGGATGAAACCTATTAACTATTATCCTTGGTATATATTTTGATTTTCTGTTGTTTTCTTAATCTTATATTGT
CAGTATGGTTTCTAAGATCTAAGATCTCCATAAGGGTAAGTGATAATTGGGTTTTGATAAATCATAAGGAATCTTCTAC
TAGAAATATGTCTGTTTATTTATTGTACATCAGGAAAMGATTAGTTTACTTTATGCCAGAAGATAATGTTTGGGCCTAA
ATCTTAATTTTTCTATCTAGTGTTAATACAGTAGAATGCCTAAAGGATATATAGAAGAAAAGACAAAAAAGAAGATGA
AGAGAATGCATCATTAACAGACTGAATCATCAGTCCCTACAGAAGGGGAATTTGTTCTTTCAAAGTAGAATTTACAGCAG
CCGGGCGTGGTGCCTCAAGCCTGTAATCCCAGCACTTTGGGAGGCAGAGGAGAGCAGATCACGCGGTGAGGAGTTAGAG
ACTAGCTGGCCAACATGGTGAAATCCCGTCTCTCTTAAATAACAAAATTAGCCAGGTGTGATGGTGCATGTCTGTAA
TCTCAGCTACTCGGGAGGCTGAGCAGGAGAATCACTTGAACCCAGGAGGCAGAGGTTGCAGTGAGCCAAGATCGTGCCA
CTGCACCTCCAGCCTGGGTGACAGAGCAAGACTCTGTCTCAAAAAAAAAAAAAAAAAAGTAGAATTCAGCTGGGCATGGT
GGCTCACACCTGTAATCCCAGCACTTTGGGAGGTGATCACATGAGGCCAGAAGTTTGAGACCAGCCTGGCCAACATGG
CAAAACCTGGCCTGTACTAAAAATACAAAATTAGCCAGGTGTGGTGGTGCATGTCTGTTATCTCAGCTACTCGGGAGG
CTGAGCAGGAGAAATCACTTGAACCCAGGAGGTAGAGGTTGCAGTGAATGGAGATGGCGCCACTGCACCTCAGTCTGGGC
GACTGAGTGAGACTCCATCTCAAAAAAAAAAAAAAAAAAGTAGAATTCATGGGAAAAATTTTGTGTTGCTATTTAGCC
TTATTTTTTAAATATTTTCAATATATTGTCTGTTTGATACATATGAACAATCTGACTACAACCTATTGGGAAACACCAGTA
TTTACCTTACCTTCTAATGTAAGGCATGATTCCAGGTATTTTCTCATACCTCAAACCTTAAATCTCTAATTTAGTCCCA
GAAACAGTATTTCTACATGTCAAACGTTTTTTGTTTTGTTTTGTTTTTGGAGACAAGTTCTCACCTTGTCAACCAGGCT

345/375

GGAGTGCAGTGGCGCCATCATGGCTTACTGCAGCCTTGATCTCCCTGGCTCAAGCCATCCTCCCACCTCAGCCTCCTGA
 GTGGATGGAGCCACAGGCATGTGCCACCAGACCGGCTTTTCTGTTTTTAAATTTAAATTTAACTTTTTTTTTTTTTTTT
 GTAGAGACAGGCTCTCACTATGTTACCCAGGCTGGTCTCAAACCTCTGGGCTCAAGTGATCCTCCTGCCTTGGCCTCCC
 AAAGTGCATGAGCCAGTGCACCCAGCCTCAGAATATTTTAAAGATGAAAACCTAATGCTCAGTTAAACTTTTATAAGA
 TCTATGTGCTTCTAAATAAGTGTAAAGATGACTATTTTCTGGATGTTGTATTGGTGGGAAGATGGAGAGATAGAAGAA
 CAAGTGTATTCTCTGGTTGTATTTTCTCTCTCTCTCTCTTTTTTTTTTTTTTCTTGAGTTAGAGTCTTGCACTGTTGC
 CTGGACTGGAGTGCAATGGCGTGATCTAGGCTCACTGCAACCTTCTCCTCCAGGTTCAAGCAATTCTCCTGCCTCAGC
 TTCCCAAGCAGCTGGGATTACAGGCGCCTGCCACCAGCCTGGCTAATTTTTTGTATTTTGTAGTAGAGACAGGGTTTCA
 CTATGTTGGCCAGGCTGGTCTCGAACTCCTGACCTCGTAATCTGCCACCTTGGCCCGCCAAAGTGTGGGATTACAGG
 CGTAAGCCACTGTGCCCGACCTCTGGTTGTATTTTCAAATATATCCAAATAATTTTTAAAAATGTATTTAGTGAGCA
 CTAGATTCCAAATAGCAAGAGCAATTTAGCAAAAGTATAATTTCTAGAGAGGAATCGTACAGTACCTCGTTTTGCTT
 TTTTGTCTCTAGGTCTATGTCAGGATGGGAGCATAACTGACCTGGCCCTAGTTCTAGGAGGAGCATGTGCCCTCTAAC
 ATGTGCACAGAAGGATAATAGGGTCAGTGGGATGAGGAGACCAAGTGACTAAAGCAGATSTGAGAATCTGAGCTGTAAA
 GGATTTGGAGGTGGGATGGAGGGATAAAACCTTAGTGGGAAGCAGACAGCAGATAGAGAAGATATAGGATAAACTCACG
 GAAGGTGTAAGCAGGTTTCATGATTTTAAATTAGCCTRTTAAGAGGTTGTGTTGGAGGTCTGTTTTCTTAGTGGGGCA
 AAGTGGCAAGGGAAGTTTCACTTCTGAATAGGGTGGAAAATGAAGATATAAGGAAAGAAAGAGAGAAAGAGGAAAGACG
 TATTAGGCAGTGTGAGGCAGAGAAAGAGAAGAGTGGGAGAAGGAGGGGAGTCAGACTTTCTTGGCTGGAGGCAAACTG
 ACCAATGCCCGTTGCTGCCCTTTCCACCGCAGGGTTTCATTTGGTGAAACCTGGTTGGACTGAACCTTTAGGAGAACCT
 TGAAGTAAAAAAGAAATCCCAGACAGGTCAGTGGCGGATGTAAATGTTTAAAGGAAGAACAGACAGTCAGCTGTAGAAAT
 GGAGGGAGGGGTAGAGCTGACTGGAGAGCGATTTATGGATGGTATATTTTATGAGGCTTGAGTCTTTTTTAGCACTAAT
 AGTTGGCGTCAGCTTCACCTGTTGCCCTCCATGAGTCATGCCCTGGTAGCAGAGGATGGTGGGCCAAC TGCCAAGCCATC
 CCTGAAGGACCGGCTGCC TGGGAGTGAGGAAAGGTGGTTGATGGGCTCTGAGACAGCAAGGTACAACTGAAATGGGG
 TGAAAAGAGACTGTCAAAATAAGTATGGGCTGATTTGTTCTAATATATCATAGGTTATTATTAGATGCTGGAAGAGTAA
 AATGGAAATAGAAGATGAAAAATGTGAACCTTTATCTTGATTTCCATTTTAAATCTCCTAAATCTGAGGAGCTTTGCAAT
 TCCTCTTCTGGATATAAATCTGCCCTACAGTAGAGTTGCAACCTTGGATAAAATAAAATAAATTTGGCCCTCCCTGAGCCTC
 TGTTTTCCCTGTAAATCAGGACTAACATAATCTACCTCAAAGGATGTGTTGAAAATTAAGTGAAAACCTTACATAAAT
 ATGTAGTGTGGTGGGGACATATGATAGGTACTGTGGCTTATCCTTAGGAGGGATGAGGAATGGAACCTTTTAAACAT
 AAAAGGTCAACTTTATATGCTGCCATATAAGTAACCCAGTGCAATTTGGAGCTTGAATCAACAGGGCTGGGAGAAAGCTT
 ACAGAGTGTGCCCTTTGAAATCCCAATACCCAGTCATGGTGATTTATGAGACCTTACCAGCTTGCCATATGTGATGGCCCA
 CTGAGTTTGTACTTTAGTTTGTAGCTCAGTTACCCAGCACTCTATGATAGCCTATTTTTTATTTACACTCTCACTAAC
 TCCTTTATTATGATTTCTTTGAAAGAATATGAAGACAGCCATAAAAAAGACTCTTATTGAAGTTGAGAGGGTCTCCTGT
 AGGTCTTCACTTCACTGTGTCTAAACATTGGTCTGTTGCTTGTGCTTTGCTTTCTCTCACCTGGATGACCTTCAAGG
 CTCTTCCAAATGATTTCTCTGATTCCTGAAATACTGAAATTGTGATTAAACAGAAAGTTTCAAGTGTTAATCAATATCAA
 GATAGTAGTTGTCTCTTCTGGGAAAC TAGAAATGAAAACCAACATAGGCCTCTGTAATCATTGCACAGATTAAAAA
 TGAAAATGCAGCTGAGAAACAGAGGAATGAATGAGAAAACCTTAAACCTAGTCTAGCCCCAGGATGAGGTCTTTGTCA
 TGAGTCTGACGCTAGCCACAGCCGTAAGAGAAGGAATTCCTAGTAGTGTAGTTGTTACAAGGGAATGAGTCAATTTTG
 CAGGTAATTTGTTCTTCTTCCATTTTCCACTTGCTGTGTCAGCCACTTTACAGAGGAGTCCGACTTTGTTCTGCTTAAAGAGA
 AGTCTCTTTCTTTTATTGTTTAAAAAATTTCCAGAAAGCCCTTAGAAAAGAGATTTGTGAGATCAACTGGTT
 TACCTTCTTCATTTCAGATGAAGTAACAAAGCACAGAAAAGTTATTTTGTCAAGGTTTCTGTCTTGTAGCAAAATACAAAC
 TTTCTGGTGTAAACATATGACCCTGATTTGGGTCTTTACTGACATCATCACTTTTTTTTTTTTAAATTTCTGAGACGG
 AGTCTGTCTGTGTTGCCCAAGCTGGAGTGCACTAGCACAACTCTCGGCTCACTGCCACCTCCACCTCTGGATTCAAGTG
 ATTCTCTGCTCAGCCTCCTGAGTAGTGGGTATAACAGGTGCACTGACCAAGGCTGCTGTTTGTGTTTGTAGTAG
 AGATGGGGTTTTACCATGTTGGCCAGGCTGGTCTCAAACCTCTGCGCTCAAGTGATCTGCCACCTCAGCTTTCCAAAG
 TGCTGGGATTACAGGTGTGAGTCACCACACCCGGCCCAACATCATCACTTTTGAATGAAATTTTGTAGTTGGTGATGACT
 TTATTATTTGTATTTGATCCTTGTCCATTTTTCTCTAGATCTGGTACTAATTTTCATGTGGAATAAATCGTTAGGAGG
 TTTTCATTTTGTACGTTTGGCTGCAAAACAACCAACCCAGTCTTTAGGTTTTCAGTGGGGATTTTTGTTTTAGCCC
 AATTATTTGTATGACATGTATCTGCTCCAGAGGTTCTTATAGGTGAAATGAGATTTTATGTATCTGTATTCAAACACAT
 AGAT
 TAATGTAAGCCTGTTGTGTGTTAATGAATGATAGGGTAATAATACATTATGTTCTGTCTGTAGAGGAGTTCCAGATAT
 TCAATACAGAGGACCAGAATGATTGGTCCAGAAAAAGTGCTCCTTAAGCTGGATCTTGAATACTGAGGATTTATATAG
 GCATCTAATAGGGAAGAGGTGGTATTCCAGGGGCTGGATAAGGCAGGGTAGGATGGGGTATTTCATGTGGATTGCTTTA
 TTGTATGTTTGTCTGGAGAGGAGGGTAGTGGGCATTTCTGGAGGAGTGAGCCTCTCTGGAACAGAGGATGTGATTATAGGA
 CCAGTGGCAGGTGTGAGAAATGTAGATTGAGGCCATACTGCAGACTGTCTTAAATGCCAGGTCAAGCCATTTGCACATT
 GTCTTATAATTCATGAAGAACCCTTACATTTGACTATAAGGAAAAATATTATGAAGAACTAAAAATAAGGTGACTTTAGA
 AGGTTATATCTGGTGGTAGTGTGCAGGATAGATTATATCAAGGGGAAATTTGACTGAAAGCAAGAAGAAACCGTTAGGR
 AATTAGGTGTAAGAGTGATAAGGGCCTGAAATAGGATAGTGATGAAAAGAGAGGAATGAGTAGGAGAAAGATTGCACAG
 AGAAGGGTGACAGCATACATAAGACTTGGCAGGACCACAGCCAGAAAGAAAGCATGAAATTTCAAACCTGAATAATGGAC
 AGAATTATAGTTGGAATAATCATGAAGAGAAGCCAGTTGGGTATTGGGGGAGGGCTGGACAATATGACAGTTAAGTTTTT
 AGACATATAATTTAGGTAAGGCTATGTATCTAAGCGGAAATGCCCTATAAGCTTTTCAAGTTGTGAGGACTGGATTTCTGG
 TTAATAAAAAAAAAAAAAAGAGGGGGCAGGATTTTACTTGGGTGTTGTCTGCAAGTTGATAGCTAAGACCTTAAGGCT

346/375

CATCTGTGAAACGGGAGTGACAGTGCTCATTTAAAGGTTATTATTAGAAATAAATGAAGTAATTCCAGGAGAGTACATAG
GACTCTCCTTGACACATAGTAGACCTCAATAAACATTAGGTTTTATTATTGTTTATTATGGGTTTTAGGGAACAACAC
TTTTGTGAATTATTAGAACCTTATTTGGGAAGCTATAAAAGCCATCTGCGTGATGTGTTTTCTTAGTACACCAAATGGA
AGTTCATATGTTCCATTATATACATGCTTCCCTAGCTGTAGGGGAAGGTGATAGCGCATGTTAACTGTTGATCACT
GTTTGTAAAGGCTTTTCGTGTTTTTTACATATTTGGTTAAGGATCTTAATCCTTGAGCTGTATTTGTTCTCATTGTTTT
GTGTCCAGAGTCAAATTAAGTTTAAGGAATTTATAAAGAGCTTCTTTGCAAGAATGATATTAATCAATGTACTAAAGC
TACATTCACCCAAAGTGTAATAGACTTACACAACATGGAAGAAATCCAGGAGAGGCAGACAGTTATTCATGAAGAGTGG
TAGTATTCCTGTCTGCCTGTCTGTACATTTGTCTGATCAGTGCATTCTGAGAAAATATATGCCAATTTGAAATCTCCAAA
AGCATTCTCAGCCAGTATCCGTGATTCTGATAGTTTACAACTGTTGATAGCATAAGCTGTTAGGAAGATATTGTAGAA
ATTTTAATGCAGCTGTTTTAATTAGATTGCTTTTCTTATAACAAGTTTCAGTGTCTTCTGGTCACAATACAATTTATTAG
CTCCTGACACATGACACTGCTGGATCACCAACCTTAACTCTGATTCTCTCCATACAACCCAGTATCCTTAAAGTAAATG
CTGCATATTTTATTGCTGGTAAGAGAGGCAGGGCCAAGATTGCAACTCACATGAAGCCAACTAGAGAAGCCTATGCTCT
ACACTATTTTACATCTCATAATTCTCATACTACTAACCCTGTTGCAAATGAAAAAGAAGTCTTATTATTGTACCCTT
TTAATTGCACTTATTATTGCCTTCAGTAAAGTCTTCATTTCTAAAATGTCTTAGTAAAAACAGTAATTTCAAAAAATAT
TGCCAACTAGGAGTACTAAATTCTAATTTTGGTTATATTATGCGGCTTGGATAAGGAAGTTTCTTAGGCTTTCATATT
CCAAATTATTGGACTATTCTAAAAACATTTTAAAGTATTTTGATGGATGTAGTCTATTCTAATATAATGTCTTTCAAGT
GTTTGAAAGTTACTACTTATTCAAACTCAACTGTCTGGCAGCTTTTCTTATCCTGAACTCTGTGAAGAACTTCGGGGA
CAGGAGGTAAATGTCTTTGAAGAGTAAGAAATCCAAAACCTTCATGTATTTACATGTTCTGGTCTTGTCTCATAGGATT
CTTCTTTCTCCTTACATACCTCCTTTAAATCCGTACCTCCCCGGTCTTCTCCATCTTGCAAATGGCACCAATGTCCA
TCCTAGACATTGATCATCCCAGAAGTCTAGGAGTTGATTCTTCTCATTTCTTCAGTTCTGTTGTGCAAGTCTTCAAGTC
TTGTCAGTTTTGCGCTCAAGCACTTTTACAACTATCCTCTACAGAGACAGCTTTACAAAATGTAAATCACATCCTATCA
TTCCCTGCTCAGAACCTTCTAATGGTATCCTCACACCTCTGGAAGGCTCATACCCTCAGGACCCACGTGATGTTGCTT
TGACTTGCCTCGGCTCTCATTCCGTAGACCTGTCTCCCTCAGACTGGCTGTGTTACTCAGCCTTTGTTGAGAGTGCTG
TGCCCCAAATCTGGTTGGCTTATTCTAGGCATTTCGAGTCTCTTCCCAAATACCACCTTCTCAAGTGCAGCTTTTCTCTA
CTACTTAATTTTATAGTCCCCCATCAATGTACGATGTTACCCTCTTTTCTTTCATTGAGAGTGTTGTAAATTTTTTTT
GTCTGCTTRTTTTATTGTCTTTTTTGCCCCATAAGTCCAAGGTTTACATGAACAGGGAACCTGTCTGTTTTTTATTACT
GTATCCCCATGCTGGCACATACTATGTAATAAGTGTGTTGTTGAGTGCATGAGTGAATAACCATTCTAAAAAATCTGA
TGTTTTAAAGCCCTTTGCTTTATATAAGAATTTTACTTGAACCCCTGGTATTTTYGTTTGTATTGTTTGTGTTAATAAATG
TCAAGAGTTCAGTAGTAAGATAGGTTTCAGAAATGCTAAGTTAAACAGAATAAAGAAAGAATATGTATTACAGGTCCTG
GCAGAGCCTTGAATATGCTAACATTTGACAGTGGGAGTCTTTGAGAATTATCACATGAAGCTGCTGTACATTACAACAC
ATTCTAGGAAATGCTGTCTTAGACAAAAACCTGTCTATATTAGAATTGGGGTAAGGGGCACGATACTGACCGTGAGGCAG
CAGATTCCTATGGACTACATTAAAAAAGGATTCAAAAAGAATACAGCGGTTGGGACTATCTACTTTTTTAATTTTTTTAT
AACTGTGATATGAAACAGTGGCAAAAGGATTCAAAAAGAATACAGCGGTTGGGACTATCTACTTTTTTAATTTTTTTAT
TACACTTTAAGTTCCTAGGGTACATGTGCACAATGTGCAGGTTTGTACATATGTATACATGTGCCATGTTGGTGTGCTG
CACCATTAACTCGTCAATTACATTAGGTATATCTCCTAATGCTATCCCTCCCACTCCCTCACCACCAACAGGCCCC
AGTGTGTGATGTTCCCCCATCCTGTGTCCAAGTGTCTCATTTGTTCAATCCCACCTATGAGTGAGAACATGCGGTGTT
TGGTTTTCTGTCCCTGCAACAGTTTGTCTCAGAATGATGGCTTCCAGTTTCATCCATGTCCCTACAAAGGACATGATGAA
CTCATCCTTTTTTATGGCTGCATAGTATTCATGGTGTGTATGTGCCACATTTTCTTAATCCAGTCTATCATTGGTGGG
CAATTGGGTTGGTTCCAAGTCTTTGCTATCCTGAATAGTGTGTCAGTAAACATACATGTGAATGTGTCTTTATAGCAGC
ATGATTTATAATCCTTTGGATATATATCCAGTAATGGGATGGCTGGGTCAAATGGTATTTCTAGTTCTAGACCTTTGAG
GAATTTGCCACACTGTCTTCCACAAATGGTTGAACCTTACAGTCCCACCAACAGTGTAAAAGTGTTCCTATTTCTTCA
CATCCTCTCCAGCACCTGTGTTTCTGACTTTTTTAATGATGTCATTCTAAGTGGTGTGAGATGGTATCTCATTTGTGG
TTTTGATTTGCATTTCTCTGATGGCCAGTCAATGATGAGCATTTTTTCTGAGTGTCTGTTGGCTGCATAAATGTCTTCTT
TGAGAAGTGTCTGTTTACATATACTTACCCACTTTTTGATGGGGTGTGTTGATTTTTTCTGTAATTTGTTTAAAGTCTT
TTGTAGATTCTGGATATTAGCCCTTTGTCTGATGGATAGATAGCAAAAATTTTCTCCCACTCTGTAGGTTGCCTGTTCA
CTCTGATGGTAGTTTCTTTGCTGTGCAGAAGCTCTTTAGTTTAAATTAGATCCCATTTGTCAATTTTGGCTCTTGTGTC
CATTGCTTTTGGTGTTCAGACATGAAGTCCCTTGCCCATGCCATGTCTCTGAATGGTATTGCTTAGGTTTTCTTCTAGG
GTTTTTATGGTTTTAGGACTAACATGTAAGTCTTTAATCCGTCTTGAATTAATTTTTGTATAAAGTGAAGGAAGGGAT
CCAGTTTCAGCTTTCTACATATGGCTAGCCAGTTTTCCCAGCACCATTTATTAAATAGGGAATCCTTTCCCCATTTCTT
GTTTTGTGAGGTTTGTCAAAGATCAGATGGTTGTAGACATGTGGTATTTTCTGAGGGCTCTATTCTGTTCCATTGG
CCTATATCTCTGTCTTGTACCAGTACCATGCTATTTTGGTTACTGTAGCTTGTAGTATAGTTTGAAGTCAGGTAGCA
TGATGCCCTCCAGCTTTGTTCTTTTTGCTTAGGATTTGTCTTGGCAATGCGGGCTCTTTTTTGGTTCCATATGAACTTTAA
AGTAGTTTTTCCAATTCTGTGAAGAAAGTCAATTGGTAGATTGATGGGATGGCATGAATCTATAAATTACCTTGGGCA
GTATGGCCATTTTCATGATATTGATTCTTCTATCTATAAGCTTTGTGTCTCTTTTATTTTGTGAGCAGTGGTTTTGT
AATTCTCCCTGAAAAGGTCCTTCACATCCCTTGTAAGTTGGATTCCCTTGGTATTTTATTCTCTTTGAAGTAATTGTGAA
TGGGTGTTCACTCATGATTGGCTGTTTGTCTGTTATTGGTGTATAGGAATGCTTGTGATTTTTGCACATTGGTTTTGT
ATCTTGAGACTTTGCTGAAGTTGTTTATCAGCTTAAGGAGATTTTGGGCTGAGATGATGGGGTTTTCTAAATATATAAT
CATGTCACTGCAAACAGGGACAATTTGACTTCTCTTTTCTAATTGAATACCCTTTGTTTCTTCTCTGCTGCTGATT
GCCCTGGCCAGAATTTCAACACTATGTTGAATAGGAGCGGTGAGAGAAGGCATCCCTGTCTGTGCCAGTGTTCAAAG
GGAATGCTTCCAGTTTTTGGCCATTAGATGATATTGRTGTGGGTTGTCTATAAATAGCTCTTACTATTTTGAGATA

347/375

CATCCCATCAATACCGAATTTATTGAGAGTTTTAGCATGAAGTCTGTGAATTTGTCAAAGGCCCTTTCTGCATCT
ATTGAGATAATCATGTGGTTTTTGTCTTTGGTTCTGTATATATGATGGATTACGTTTATTGATTGTCATATGTTGAAGC
AGCCTTGCATCCAGGGATGAAGCCCACTTGATTAGGGTGGACAAGCTTTTGATGTGCTGCTGGATTTGGTTTGCCAG
TATTTTATTAAGGATTTTTCATCGATGTTTTCATCATGGATGTTGGTCTAAAATTCTCTTTTGTGTCTCCGCC
AGGCATTGGTATCAGGATGATGCTGGCCTCATCAAATGAGTTAGGGAGGATTCCCTCTTTTCTATTGATTGGAATAGT
TTCAGAAGGAATGTTACCAACTCTCTTTGTACCTCTGGTAGAATTCAGCTGTGAATCTGTCTGGTCTGGACTTTTTT
TGGTTGGTAGGCTCTTAATTATTGCCTTAATTTTCAAGACCTGTTATTGGTCTATTACAGGGATTCAACTTCTTCTGATT
TAGTCTTGGGAGGGTGCATGTGTCCAGGAATTTATCCATTCTCTAGATTTTCTAGTTTATTGTGTAGAGGTGTTAT
TCTCTGATGGTAGTTTGTATCTCTGGGGGATTGGTGGTGGTATCCCCTTTATCATTTTTTATTGCATCTATTGATTCT
TCTCTCATTTCTTCTTTATTAGTCTTGCTAGTGGTCTATCAATTTTGTGATCTTTTCAAAAACCAGCTCCTGGACTC
ATTGATTTTTTTGAAGGTTTTTTTGTGTCTCTATCTCTTCAGTTCTGCTCTGATCTTAGTTATTTCTTGCTTCTGCT
AGCTTTTGAATGATTTGCTCTTGCTTTTCTAGTTCTGTTAATTGTGATGTTAGGGTGTCAATTTTAGATCTTCTGCT
TTTCTCTGTGGGCACTTAGTGCTATAAATTTCCCTCTACACACTGCTTTAGAATGTGTACAGAGATTCTAGTATGTT
GTGTCTTGTCTCAKYGGTTTTCAAAGAACATCTTTATTTCTGCCTTCATCGCATTATGTACCCAGTAGTSATTCAGGA
GCAGGTTGTTTCACTGATGTTGAGTGGTTTTGAATGAGTTTCTTAATCCCAACTTCTACTTTGCACTGTGGTCT
GAGAGAAAATTTGTTATAATTTCTGTTCTATTACATTTGCTGAGGAGTGCTTTACTTCCAACATATGTGGTCACTTTGG
AATAACTGTGATGTGGTGCCTGAGAAGAATGTATGTTCTGTTGATTGGGGTGGAGAGTTCTGTAGATGTCTATTAGGTC
CGCTTGTTCAGAGCTGAGTTCAATTCCTGGATATCCTTGTTAATTTTCTGTCTCGTTGATCTGTCTAATGTTGACAGT
GGGTGTTAAAGTCTCCCATTTATTGTGTAGAAGTCTAAGTCTCTTAGTAGGTCTCTAAGGACTTGCTTTATGAATC
TGGGTGCTCCTGTATTGGGTGCATATATTAGGATAGTTAGTCTTCTTGTGTAATTGATCCCTTTACCATTTTGTA
ATGGCCTTCTTTGTCTCTTCTGATCTTTGTTGGTTTAAAGTCTGTTTTATCAGAGACTAGGATTGCAACCCCTGCTTTT
TTTTGTTTTCTATTGTCTGGTAGATCTTCTCCATCCCTTTATTTTGAAGCCTATGTGTCTCTCTCATGTGAGATGGG
TCTCCTGAATACAGCGCACTGATGGGTCTTGAATCTTTATCCAATTTGCTAGTCTGTGTTTTTTATGTAACATTTAG
CCCATTACATATAAGGTTAATATTGTTATGTGGGAATTTGATCCTGTCTTTATGATGTTAGCTGGTTATTTTGCCCAT
TAGTTGATGCAGTTTCTTCTTAGCCTTGATGGTCTTTACAATTTGGCATGTTTTTGAGTAGCTGGTACTGGTTGTTCC
TTTCCATGTTTAGTGCTTCTTCTAGGAGCTCTTGAAGGCAGGCTGGTGGTGACAAAATCTCAGCATTGTGCTGTCTG
TAAAGGATTTTATTCTCTTCTCACCTGTGAAGCTTAGTTTGGCTGGGTATGAAATCTGAGTTGAAATTTCTTCTCTT
AAGATGTTGAATATTGGCCCCCACTCTCTCTGCTTATAGAGTTTCTGCTGAGAGATCAGCTGTAAGTCTGATGGGC
TCCCTTTGTGGGTAAACCCGACCTTCTCTCTGCTGCTTAAACATTTTTCTCTTCAATTTCACTTTGGTGAATCTGA
CAATTATGTGTCTTGGAGTTGCTCTTCTTGGAGGATCTCTCTGCTGGCATTCTCTGTATTTCTGGAATTTGAATGTTGGC
CTGCCCTGCTAGGTTGGGGAATTTCTCCTGGATAATATCCTGCAGAGTGTTCCTCAACTTGGTTCATTCTCCCATCAC
TTTCAGGTACACCAATCAGATGTAGATTGGTCTTTTACATAGTCCCATATTTCTTGGAGGCTTTGTTTCAATTTATTTT
TACTCTTTTTCTCTAACTTCTCTTCTGCTTCAATTTCAATTTCAATTTCAATTTCAATTTCAATTTCAATTTCAATTT
TCTTCCAGTTGATGGAATTTGGCTACTGAACTTGTGAATGCATCATGTAGTTCTCATGCCATGGTTTTTCACTCCATCA
GGTCATTTAAGGCTTCTCTATGCTGGTTATTCTAGTTAGCCATTTGTCTAATCTTTTTTCAAGGTTTTTAGCTTCTTT
GCGATGGGTTTGAACATCTCTCTTAGCTCGGAAAAGTTTATACCCATCGTCTGAAGCCTTCTCTCTCAGCTTGTC
AAGTCATTTCTCTGCTCAGCTTGTCTCGGTTCTGCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
TAGAATTTTCACTTTTCTGCTCTGCTTCT
TACATATGGGGTTTTGGTGTGGATGCCCTTCTGTTTGTGTTAGTTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
TGTTCCAGTTTGTCTGGAGGTCCACTCCAGACCTGTTTGGCTGGGTATCACCAGCAGAGGCTGCCGAACCGCAATATT
GCAGAACGGCAAATGTAGCTACCTGATCTTCTCTGGAAGCTTCATCTCAGAGGGGCATCTGGCTGTATGAGGTGTCTCA
GTTGGCCCCCTACTGGGAGGTGCTTCCAGTTAGGCTACTCGGGGGTCAAGGACCCGCTTGGAGGAAGCAGTGTGTCCATT
CTCAGATCTCAAATTCATGCTGGGAGATCCACTACTCTTTTCAAAGCTCAGTTGGAAATGCAGAAATCACCCTGCTTCT
TGCATCACTCATGCTGGGAGCAGTAGACTGGAGCTGTTCTTATTGGCCATCTTGGAACTCCCCAGCTATACCTACT
TTATTGGATTTTTGTGTCTCCATCAGCTGACATGGTACTTACAGCCTAGAATGAGCATACAAAGGATACTCATTCGCTA
TTGATGATGACTGACAAACAGTCTCCAGGATCACCATGAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATA
CCAGGTAACAACTGCACCTGTCCCCTTGAATTGATACAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATA
GAATTTTTTATTACAAAGAATTAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATA
AAAGGCTTCTCTTATTATTTTATTTTGGAGACAGAATCTCTGTACCCCGGCTGGAGTGCAGTGGCGCGATCTCAGCT
CACTGCAACTTCTGCCTCCCGGGCTCAAGCAATTTCTCTGCTCAGCCTCCCGAGTAGCTGGGATTACATGAGTGCACC
ACCACACCCTGCTAATTTTTTGTATTTTGTAGTAGAGACAGGGTTTTACCATATTGCGGAGGCTGATCTCAAACCTCTGA
GCTCAGGCAATCTGCCTGCCTCGGCCTCTAAAGTGCTAGGATTACAGGCATGAGCCACAGCGCCCTGCCAACCTAAAG
GCTTTTCAAACTGGGAATCTCACTGAATGTTGTATCATTAAGCTAATGTGGACCTTGGATAACTGTATGCCTRTTTTC
TGGGAAATAATAGTGGAGGCTCTTTGAAAGGTAATAAATGGTGTATATCATACATAACTATGCCTGAGGTTTTTGT
GCATTTATCTTTTGGGCAAGTTGTAAGTTAAGCAAATCTGGAATTGAAATAATTTGATAACATCAGCTAATATTTTTC
AAAGTTAGATTTTTGAGGTATAATTTACATAAGAGTTACTCTTTCTAGAGGTATAGTTGAATGCATTTTCAAAATGTG
TACAATTGGATAACCACCACCATAATCTAGATATATAGGTAATGTGTAATATAATATATGTACTATATAATATAGG
ATATTTATACCACCAAAAAGTTTTCTCTTGTCTTTTATAGTCATTTCCCAAAACCCAGCTCCAGTGTGCTGATTTGCT
ATGGTTTTGCTTGGCAGAATGAATAATACATTAAAGATATAGCCTTTTGTGAATGGCTTCTTTCACTTACAATACTTT
TGAGTTTTGAGTTGAATTATAAGTTTCACTTATAATACATTTTGTGTTATTGCATCTATTGGTAATTTGTTTCAATTTA

348/375

TTGCTTTTTAGTATTTTCATTTTTTCCAGTATGTCATTTTATGGACACAATTTGTTTACCCATTCCACCAGTTGACTGAT
 ATCTGAACGTGTTTCTGGGTTTCTGCTATAGAGAGTTGCTATAAACATTTTCATATAGGTCTTTATATAGACATATGTTT
 TCATTTCTCATGGGTAGATACTTAGAAGTAGGATTGCTGGGTCATATGGTCACTCTACTTTTTTAACTTTATAAGAACT
 GTCAAACCTTTTTCCAAAGTTTCTATACCATTTTGCATTCTCACTAGCAATGTATGAGAATTTAAATTTGCTCTGCATCC
 AGGCCAGCATTTTGTATTGTTTGTATTTTGTATTTTATACATTCTAGTAAGTATGTAGTGTGGCATCTCACTGTGGTTT
 TACTTTTTGTTTCCCTAATGTCTAATGATGGTCRTGGATCTTTTCACATGCTTATTGATCTTTTTGATTCCTTATGAAGT
 GTTTGTTTGTTCAAATCTTTTGACCATCTTTTCACTGGATTGTCTCTTATTGTGTGTAAAGATTTTTTAAAAAATAA
 TTTCTGGATACAAGTCCTTTATTTGATATGCATTTTGTACATATTCCCTTCTCAAGTCTGTGGCTTGTGTCTGTGTTT
 CTTAACAGTTTTTTTTCAAAGAGAAATTTGGTAAAGTCCAGTATACCATTTTTCATTTTATGCTTCATGCTTTTTGTGGTT
 TAAGAAATCTTTGCCTAACGCAAGATCACAACACTACTTCTACTGTGTTTTCTTCTAGAAGTTCTTTAGTTTTAGATTTT
 ACATTTAGTTCTATGATTCATTTCAAGTAGATGTTAGTGTGGTGCAGGATAAAGGTTGAAGTTTCTTGTTTTTATGAGTG
 GATGCTCAATTGTTCAAGCATTCTTTGTTGAAAAGAATATCATTTCTCTTTTATAGCTCAAATTTTATTACTTAAATTT
 ATTTTAAGATGCACATATTAAAGTGATATGTGTAAAAGATTATATATTTCTGGAAGCATGCCTATTACACTAGTTATT
 ATTACTTTTAGGAGACAGATATTCTCTTTGTTTAAATTTGTTTCCACAAAGCATACCACGAAGTACAGAGGGGACATTAGT
 AACTATTTTATGATGATTATGGTATTCATTTAGGCCAATTTAAGTGAATTGGAGATCCTAATTTTCTCTATAAGGAGAC
 AATACTTTTTCATACAAGATTATTTTGTGGAGGCTTCATTTATGTGAAGTTTTTGCACCCATTTATTGTCATGATTAT
 TCTTCAGTGAAACAAAAGTCTGTAGTAGATATGCTGCTGCTGCTGGTTTTAGGTAAATTGACTAAATAGTTATACAAAA
 CTCTGTCTCTACCATATATGAATTCAAACTGTATCAACAATTACAGAATACTATGCTAACATCTAATAAGAGAGTTAGC
 CCATGTAGAGAAGAGAAATATAAATACAGCTATCAGATCAGTCTCATGTTTATTTTCAAGGAGCCTCTTAGCAAAAA
 TGGTTTTCTTTCTCCATACATGTTGTCAGGTGTTTACTATTTTAAATGAGACTTTTTTGTAAAAAAAATTTAAATAAG
 ATCATTTTAGAGAACGATTCTCAGCTTGTTTTCAGATGATTATTTGGTTTTTAAAAAAGCAGCCTGGAGTTCCTCTTAATCTC
 AAATCTCCATAAAACCTTACAAGAGATGTTTTTCAATTTACTGAAAGGAATAGTTTTTTCTTAATCAAATGTAGAGCCATTA
 TCACTAGAGGGCAGTAAATACAAACAGATTTAGTGGATTTACTGGCACTAACGATGTTTTTCAAGAATACTAGCATTAATC
 AAAGAAAGTATAGTTTTTATAATATGAAAATACATGTAACATTCTGTTATGTAAAATATTGGTTATGAATCAATTTCTAG
 ATTATTGTCCTGCCCTCTAAATATTTTTAAGGCATTTGAAAGCAAAGGGAGGCTGAGAAACACTAGTTTTCTGTGGCTAT
 TCTGTTTAATACTTGAAGTTTAACTTTGCCTCAGAATCTTCAAGGGACATTTAAAAATTAGATTTGCATTTGTTCAAG
 CTGAACAGTACTGGATATATGAGAGACCAGTTATATAGATTTGCTTCTTGATTAATAACTACCACGACTTTTAAATTTT
 AAGGTGAAAGGTGTAAATAAATGTAGATTGATTATAGGATAAAATATTTTCCAATAATGTAAGTCTACTGCAACAG
 TGCTACTGCCTGGAAAACCTCCTTATGTTGGAGAGGTCCAAGAGCTAATACACTTATTTTAAACAATATTTCTTAAATAT
 TTCAAACACAGTAATATAATATACAGCTTAGAATTGATTATATTAAACGGATCTATTATGTAGGCTCTAGGCTAAATATA
 AAATAATGCCTGAAATAGTTTTCTTTTTTTGGCAATTTAGAGTACTCTGAAACCAGACAGTCTGGGTTCAAATCCTGGC
 CCTGTTACTTACTACTGGCTTTGTGACCTTGAGCAAGACAACCTTGACCTCTCTGAGCCTTAGTTTTCCCCATAATTTAGT
 TTTGTTTTTCCCTATTCAAAAATGCATCTTTTCTCTCTTGACCTCTGTTACAAAGTCAATAATGACAGCATGTGTTAAT
 GTATCAGCAGTTTCAGCTCCATCAGCAGAATTTCAAATATCCTGAAATGTACTGAAATAGTTCAAAAAGATTGTTAATTG
 CTTGGGTATCTGGTAAGGACTGAGAAAACAAGGAATAGCAGGGAAGTGGCCTCTAGAAATCTGAGGGGTATTTCTAGG
 AAAAGTCTGAAAAGAGAACTAACTGAACATTATGGGAATTTTTTTTTTCTTTTTTGAGACAAGGTCTTGCTCTGTCTAT
 CCAGGCTGGAGTACAGTGGTGCATCATGCTCACTGAGCCTTAAACTCCTGGCCTCAAGCCATCCTCCACCTCAGC
 ACCTCCACCTCCACCTCAGTAGTATCTGGAACCTACAAGCAGTACCACACCTGGCTAATTTTTAAATTTTTTGT
 AGAGACGGTGGTTTTCTCTATGTTGCCAGGCTGGTCTCGACCTCCTGGCCTCAAGCAATCCTCCCGCATTTGGCCTCCCA
 AAATGTTGGGATTACAGGCATGAGGCATTCACCAGGCCAAGAACTATTTTTTCTATTTCAACAAACACACTTGCATA
 TATGTATATAAAATCATTTGGGCATTTGAGAGCAGTGGATTACAGATAAGAAACCTGAGCTCTAGCTGTAACGCTGTCC
 CTCAAGTTGTGTTGTCAGAACTTTTCTGGACCTCAGTTCTTGTCTGAATGTGTCGTCATCATTACATCTGCATATGAG
 GGCAGCTGTGTTGTTTACATAGCGCTCCCAAACATAAGCGTGTCTCACTATATGGCAGGGCTGTCTGCCTGTGGGCA
 CCTGCTTCTCACCCTGTCCAGAGATCTGACCATGGTGATAGTAACCATGATTCTTTAATTCAAGGCATCTGTAAAGTTA
 GCAAAAAGATTGAGGATAAAACAAATCCACTCCTAGATTTCATACCTGTTTATCATAGAGTTTGCATCAGCCTAATTATATG
 ATGAGCTGTCTACACCATTAAGAGCAAGGACTGGGTTTGCATTTCAATCCTGTACCTATGGAGCAAGTTATTGAATA
 TGTAAGAAGGTCCATCTTTTCATGTTAAATAGGGATAATATTTATCTTATCAGAATGTTGCCAAGATTAGAAATGAGG
 TATGTAAAGTTCTTTGTGCATAGTAGGTGCCTAGTAAATGTTGTAACCTTATTAAAGTTTCTTCATTAAATTTGGTGAAG
 CCAAGTCTGACTATAAGAAATTGTATCTCTCTGGCTCTATTCAAATTTCTCTTCTAAATTTATCTAGATTCTCTCTGCAGA
 TAGCAGCTACCGTGGCAATAGGAAGGAGATTCTAGTCTCCTAGAAATGGAGATTAGGGAAAAATGAAATGAATTTTAAAT
 TGGCTCAGAGATTTTTGAAAAGATTCTTATTTCCCTAGAAATATGAAAACCTTTCCCTTGGTACTTTTTTACTCAATATGAT
 TAAATAATCTCCCTTATTGTCAGCAAATTAGGGACTTATTTGAATAAGTTAAATCCTTTTACATCCAGCACCTATTAGAA
 TGCCTGGCACATAATAGTTGCCAAATAGAAAGTCTGTTGAATGAAGGGACCATCACTCACATTACAGCAGGGAGAAGAGGC
 TGCAGATTTTAGAGGGAAGGGAACTGTATGTGTGTTTCTGCATAATGTTTAAAGACAAGGAGTATTATCTACTATATG
 TAATCTGTTTTAAATGTTTTTGTATGATTTTGTCTGAGGGTGAAAACCTTGTCTTTTCTGTACCTATAATCAGTATAA
 AAATATTGATGTTTTGTCATCTGCATCAGCCAACAATCTTTTGTGGCAATAGTACACTACCTTGAGAAATACAGGGACA
 TAATAAGTACTTTTCTGGCTCAAAGATCCTCCACCCTGGATGAGGAGTCAAAGTTGAAGACAGTTGAAAAAAATAGA
 ACAGTGATTCTTAACTCAGGGGAACATTCAGGAAATTTCAAGGGACAGTGACTGGGGAGTACTCTGTGTGTTGTTGGG
 CAGAGGCCAGGGAGGCTAGATGTCTGGGATACATGGGACAGCCTTTTACCAGGGAGGTTTGTCTGTGTCTCCACACAA
 CTTCCAAAAGTCCCAGCAGCTATTACATAGGTGAAAAAACAAATGCATTTATAATTTCTCTGAGCCTAGAACCACAC

349/375

TACTTTTTACGTATAAGTATTAAATATTTTTACATGGTTTTAATCCACACCAAATTTTCTAGTAATGCAGCAATAGTGT
ATATTGTGAAGATGGCACTTTGTTACATTTGAAACCTTTCAAAGAATCATTCATCATATCAGGAAAAAGGAAAATTTTT
CTAACATAACACCCCTGTATTCTATTTTCATGCTACTGTTACTTTTTGTGGTAATTCCTCCCATAGAGAAATCATAGCAA
ACCCCTTAGATAGCACTTACTGTTCTAAGAGCCTTATGTATATGCACTAATTTAATCCTCACAACAACCCGTAAAGGTAG
AAACTATTATTCTCATTTTCCATGTGAGTAACTGAAGTATGGGAAATTTAAATAGCTTCCCCAAGGTACACAGCTAA
TCAGTTATAGTAGTTTTTGGACTACTTTTTAAAAATGTAGTTGTGTACAAGTATTTATATTTTGTAGTATTTGATAGAAAT
TACTCATTTCTCCTTTATTTCACTGATAAGCCATTATACATGATTTTTTTTTTAAATCTATGTAGGGAGTATTTAGCCTA
TATGTATTCACTACAGTATTATGAAGGAAGTGTATTTAGGAATTTTCATTTTCAGGATGAATACTTGTTTATAAAAAAGTAAA
AAGTAACTGAGTCTTAAGTTTGTCAAAGAATAAAATTTGATGGATGGATGGATTTTTTTTTTTTTTAAAGGAGGGGGAAGG
CAGTGAGCCTGACTGCAGAGTGTAAATTTGCATTTAAATGACAAGTGGTATGACACTTCCACCTGTTCTTTCAGGGAGCCT
CACCAAGTATGTTTTGCCTCGAGGCCTTTGCTTTTGCCATTCTCTCACTTGGTTTTTCCCTTCTCTACCTACCTCTCACC
CCGCAATCCACATGGCTTGTTCCTTTCTTCAGATCTCCTGGTATACGTCATCTCATCAGAGGGGCTTTCCATGATCAC
CTTATAGCAACCTCTATCCGTAATCCTTATCCCTTCTTTCTCTCCATTGTGCTTATCACCCCATGACGTATTATGTATT
TATTAACCTTAGTTTTTGAATATAAGCTGCAGGTGAGAAAGCTTTGTTTCTCTTTCTCAGGCAGTGCCTGACATAGAGTA
GGAGCTTAATAAATATTGAATGAAGGGCAGATGTAGAATCGTTAGAATTTGGAAAAAGGCTGGAATATTTGGTCCATAA
GATGTACTTTGAATGATTTAAATCTGACTGAGAAAACCACTTTGAGGTTGGCAGAGTAGAAGAAGGAGGGTATTTTAGG
CCGAGAATTTGGTAAGACAGAGATGGGATGTCAGCTGTATGGTGAAGGTGGAGGARCTACTAGTCTTTTCAGGAACAGAG
CAAATGTAATAGAGCAGCTGAAAAATAGGCTTGGCGTTGGGGATTAAAGGTCAGATATGGCAGTCTGGAATTTACAGAGGG
ATGTGATGAAGCAGGCATTACTAGCTTTGAAGTAACAGGCTGCGGCTGGATTTGAGGAAAAATTGATCTGGCAGTAGAGG
TCAATATGAGACTAGAAGGGGAAAAAGCCAGGGGCAAGAAGATGAGCTAAGAAGCAATTACAGCATTTTGGCCCTGAGAC
ATGGAGTGCTGTGATGCAATTGAAAGGAAATATAACATATATATTTTAAAAACAAATGACAAACCAGAGAATTTTTTTA
AATATTAGTATAATAGAATGATTATCATAATGATCATTGTCACTGTCTCTTTACTGTCTGATACCTACTTATCTTCAA
CTTTGTACCATTTGTTGTTTTAAGTGCTTTGCATATATGGTCTCATTTAATCCTCATATGTATCTGTTCTGGTTATTTA
TTGCTATGTAAGAAATCACTTCAAACCTAATACTTTGAAATATGAATGTATTTTTATTAGTTTTTCATGGCTTTGTGGGT
TAACCTGGTCTTGGCTAGACATTTCTGGCTTGGCATTCCTCATATGGTTGTCAGCCAGTGGGTAGCTATCTGAAAGCTGAA
CTGGCTGGATGGCTAGGATGGCTTCTTGCCCTCAGGCTTGGCTCTGGGCTGGGCTGGCATTTGCTGAAGACTGGC
CAGGCATGTGTGCTCTTTCTTGTGCAAGTGCTCTCTTGGCTTTCTCTCTTCACTGTCTGTGAAGTTAACATGGACTTC
TTGTAGCATAGCCTCTCAGAGTAGTCAGACCTTTTTTTTTTTTCAACCTAATGGCTTAGGGGTCCCAATAGCACATTCAA
AGAAAGCAGGATGAGAGCTGCAAGATTTCTTATGACTTAGCCTCAGCACTCATGCACCATCACTTGTGTTGTTACACAAG
CCAACCTCAGATTAGTGATGAGACAGTGTGGCTCATTAAGAGTATCTTTGGAGACTAGCTGCCACAGTAATCCACTTTAC
AGATGAGGAAGCTGACACACTAAAAAGATTATTTGTCACTGATTTGTGCACAAAAGATTTAACTTGCATTTCTGTTCT
CAGTACCAGAGTGAACCTGGGAAAAATCATTTTTTCTCTCAGGCTCAACTTTATGTGGAATGAGGGAGTTAGAGGGG
GTGATATTAAAGTTACTTTCTATTTCTCTCAGTCTTTTAAATATTTGGATTGAGATTACGGGAGGGGTAATGGTAAGGA
AYAACTGAAAGAAACAGCTCTGGATAAAAGATAGGGCTTGCTAACAAGTTGAATGAAGGAGGGAAGGTGATGCCGTA
TAGGGGAACATGCCGGGTTACTCAAGGATTCAGCTAGATGGTTTATATTAAACACCTGACAGTGTCTGACGCACATGAA
ACACCTGTTGAATGGTAGGAAAGAGTCATAGATTCCATCTGAGATACTGGAAAGAAATATAGGCTCACTGACTGAAATGG
AAGTAATTATACTAAGAACTACTTTAAATAGAAAAATGTCTCACAGTTTTGAAAAAGTTTGTGCTGACTAGCAGGGCAT
TCGAGAGGAGAATCTTGTATTAGAAATATGGCACTGAAGTTCAAGTTAGAAGTGGTCATTGAAGATTGTGGGCTAGG
GAAATTAAGAAGTTTCAAGATCCTGGGAGTTGAGGGAGAGTAGTAGGAATGATCAAAACATGTGGAACACTTCAGAGAA
GTAGGGAGACCAGAGAAAAGGAGGACCTTAGTATTCCTCTGGGGGTAGCTTTAGTGGAATGTTGGAGCTTTAATTTCTT
CCTTTTGTAGAGGATAGAGATGATGGAATGAATACACAGATGTTAACAAGCAGAGGACTGTAGCAGCTAAAGGC
CAATAGAAACTCAGAGAGACAGTGTTACAGGAGTGCTTACAGAGCATGCTCTCTAAGACAGACATGCCACATGT
GGAAATAGTTAAATGTGAGGAAGACTGCAGAGTAGCCATACCAGCAAGTTAAAGCACAGAGTAGTAAGCAGGCTTTG
AGATGGAGAGGAGGTAAATGCACAGAATTATATGCTAAAAATCAACTAAAAACCTAGTTTTTCTTGTCTTCTCACCCACA
AGACCTCTTTAGTATTAAAGTTACAGGGTAATACTACACCAAACCAAATAGAAAATGCTGTTTTTCTAGAAAAGAACTTT
GATTTCTCATTTAACCCTCCTCGTAAAATGTCTGATTACTCTTGAGCTCAATTCTGGATTCTTAAGAGCCACTCATTC
TTTCTTAACCTTTGTGTACAGTTATTTAAATGTTCTGTTCTGGCTGGGCACGTTGGCTCACACCTGTAATCCAGCACTT
TGGGAGGCTGAGGTGGGCAGATCCCCTGAGGTGAGGAGTTTGGAGCAGCCTGGCCAACATGGTGAAATCCCGTCTCTG
CTAAAAATACAAAAATTAGCCAGGCGTGGTGGTGGGCGCTGTAATCCAGCTTCTCGGGAGGCTGAGGCAGGAGAATC
GCTTGAACCCGGGAGGCAGAGGTGACAGTGAGCCAAGATCGCACTACTGCCTAGCTGAGGCGACASSGAGACTCTG
TCTCTAAATAAATAAATAAATAATTTCTCTCTGATCAAAATACAGATCCTGAGTTCTATATACAAAACACTGCATTCT
TATGCATACACAGTGCCCTAGCTTTACATTTCCCTCCCCCAGAATTGCAAGTGGTCCCACCCCTAGATTTTGAAGGT
TTTAGAACTCTGTCTATACATAAACAATAGAAAACAAAAGGAGCTGAGAGCAGCCATGSCACACAGGTGAGGGAATGTGTCA
TTGCCATCTGTGCCATCTGTGAATTTCTGGACATTAGTCGTATTGTTTAAATCCCTATGCTTTTATGTTGGATGAGGGGAG
AACTACAGTCATTTCTACATCACCAGGGAGCCACTTGTTTTGGATTTGAGAGAGGGGAAGCAATTTAAATGCTCGATTGC
CATTTTTGGAGCAGTTTTTATTTGGAAGGAAGGGGAAGCCAGAGGACATTTAAATTCATAGAAAATGCCCTCCAAAAGGA
TGGGCAATTTCTAAGAATGAACTACGAATTTTGGAGGATTTTATGGTCATTATTTCATCACTGCAAGAGGGGAAGCCCCGT
TCATCTTTTCTCAGGGTGGCCTCAGAGCTGCAGGGATACCATTTTCAATGGCGTTTGTGCGGTGAGGAGAAAGCCTCC
CCAGAGGCTGGCCCTTGCCAACCAATCCCAAAGCAGCCTGCACCGAGGCCACACCCCTCGCCTTATAGGCTAAGAGCT
GGAATGCAATTGGTGCAGAGTTGGGGTTTTATGGGAGGGGCTTCTGTCACTCTTCCCGCTTCCCTGCAGTTCCTTAT

350/375

TTGGTAGCTTTTGGACAGGACTAGCCTTTCTTGCAACTAAGCATCTTGACATACATTATTCATTAAGCCCTGGAGCTCGG
GAGAGAAAGATGCAGACCCTTAGATCTTTAGATATTCTTTATCAGTGGATTTCCTTTATTGAGAAATAGTTGCTGAAT
TTTGTGCCAATCTGGAGTCTTACAAATGGCATGTATTTCATGAGGAAAGACGGCTGGATGGGATTTAATGCGAGGCTTTCT
TATGTATACCTTAATTACCAAAAATCTTTAAAACTCATACTCTGCGTGGCTTGTGGAGGTGTTAAAGTGTCTGAGATTT
TGAAGCTAAATACATTTTAGAGCTKWCTATATATATACATATATATATATATATACATATAATCAATCAAAAATGCCTG
AAGCAAATATTTACTGTCTAGTGTCTTGGGGCTACATAAAGGTAAGACTTACTTAGCTTTTGAAGAACTCCTTACTCTGA
TTACAAAATTATTTAGAAAGCTTAGACTCTACTGTAATTTGTTCAAACCTATCAGTTATGTATTCTTTCTTACACATGA
ACTAGGAAGAAATACGTGTTAATAGTGGTCAAGATAAGATTGTATAACTTTTCATCAGTTGTAGTTTGAGTGTAAAAATA
GCTKTTTTAGATACGCAGTAGTTCTTCTGTTTGTCTGTTGTTGTAATTTGTAATTTGCTTGAAGAAATATATGGTAATT
AAATACATTCATTGCAAATAAATTATTGGGCCAAATTACTTATACTGATTTATGGATTCCAGTTAGTATGTTGCACATA
AAGTTTATAAAATTAATTTGTGGCTGTTTCTAAAAATCTATACTACTTTAACCTGACGAGGAATACGTTTTTTTACCT
TTAGCTATAAAGCCCTAGGTGACATTAAAAATTGACATTACTTAACCTATGTAAGTGATACTAAAGTGAAAACTTGATTG
TCTATTACTTTGCAAACTGAACAAAGTTTTTATTACACTGTTTTGTGAATCTCAAGAAATGAATTAATAACAATTC
AATAAGATTGTGTCCATGCTTGGCAGGCTTTTTCCATGCCCTGTGGTAACATTAGCATTGTGATCCTGTCTCCACAATA
GAAGGAGGTAGAAAAACCTTATTCAGTCCTAAATGAAACATCACTTCACAGATTTTTGGTATTTGAGCCACTCGCTTGA
ACCTGGGAGCCAAATCACAACACATTTTTAAAAGATTCATTTTCTGTTACTCTGAGGATTTTTTCAAGATTGGAGTGTGTGTC
GTTTGCTTTGTTTCTTTCTTTTGAAGGACAAGTTCCTTTGTTTTAGAGATTTACTTGAATTTCTAAAAAATTAGAA
AACTTATTTTCACTCTTGGTTRTCCAAGTAGTCATGATTCCTTACCTCCCTTTAAATCTGTGGATGATTCAGATTTTTAA
AAATGTTTTTAAAAATATATAGACTTCCATTATTTGAATTTTGTAGCCATWTCTTGGCTAAAAATCTTCAGAAATGCAG
AAAAGTATAGAGAGTAAATATAAGAWGCCCTCATTATCCGCCAGAATTCAGCTCCTAGCTTTTAGCCAGCTCACAACCTG
ATGTTATTTTGAAGSGCTTCACATTTGTACTGTGATTATGAACCAATTTGTACTATGATTATGAACAATATTGCCAAGA
ATCTACATATAGAAATTTTAGTACGTTTCTTTTTGAGGAAAAATTTTCTGAGCAGCTTTATGTTTAACTACTGTACCTTT
AAAAACATGTAAAAATAGCAAAATATAGATATATTTGGTCTTATGCAATTTTGAAGGTTTTATTTTATACCATCAATGGA
GTATTTGTTTTAAATAACTTTGAATACTGATATCTACCAAACTTGTAAATGCATCACAGTGACAGTGCAGCATTTCAATGATTTT
TAGCAGAATATTGTCAGGAAAAAATAAGAAAAATTTTCTTACTATTGGACCCATACCACCTCCTTAAATATATATTGGGA
GGATATATAATATACCCAGTAGCACACTGGCGTGATGTAGAAGTAAAGGAGATTACATTTAAGGACATTTTGTTTTATT
ATTTTAGTTTGCTTCTGAACAATCTTAAATGCCTAATGTAAATTGAAGAATTGCAGTTCTGAAAAGCAAAATACAGTA
TTGAGATTCAACTGCATTTTACTTTCTTTTATGCCTTAACTGCTGTACACAGACATTCTGATGTATAATGAGAACAAA
GGATTCAAAGCATTCACTTAGAAATCCTCCCTGTTTTTTTAGTTGCAACCCCTAAATCTGTGTATTGTTTTTCAGACTA
CTTAGGCCAAAAACAATTAGAAATTCATCAATGGAAAAATTTTAGAGGTCACTTAAAAAATAAACTAAATGCTTAAAT
GGTTCTGCATTTTACAATCGGTTCTGTTTCAAACAGCAGTTTAAATGTTTTGTCCCTTCTAAATATATTAATTGAGAAATA
TGATGGGATTTCCAGAAAGAAATACATTGTATTAGCTTTAAATCAGTCCTTCCCTTGGTAAATTTTATGTAGTTATCT
TAGTAAATATTATATAATTATTTTATAGATGAGAGAAGTATCACATTTTTTAAATGTTTGTGAATGATCTAGTGCATTTT
TTTAGTACATCTAGCTATGCACTCCAAAACCAATTTGTGAGATCAACTACCAGTTGAGAAAGCACTTATGGTAATTTTT
GTGGTTATTTCATTTAGCTTTGCTGGACTGAACTTTTATATGGATAGCAAAAAAGGAAAAATGTTAATTCCTTTTAG
AAAATACCCTTGTGTTATACTTAATGTACGCTTCAGAAATATCTTTAGGAAATTCCTTAGACCGTCTTCTTAGAGTAG
AGAAGTAATTGCTTCAAATATTGTCTTTTATAATTATGTTAAATGAAATGTTGACTTCCTTGGAGTCCCTTATAAGCC
TTGGTAGGGAGGTGGGCATGTGATGGAGGATTTCTCCAATCCATGTTTTTGTGTTTTAAACAAAGGCTGGAAAGTACTC
TGGGAATAATGTATATGACCAAGAAAGATGAACATGCGAGGATGTCATTTATCTAGTCTGTACAATATTTAGATTCTTTT
ACTGGCTTTTTTCTTCAGTTATCTGTACTAATCTGCTATTTTGGTGAATTTGTTAAGCAAACTGCCAGGAAATATATAC
TTCTGTTCTTTTATATTCTTTTGAAAAAATCCAATAATATATGTAGCATATCTGCAGGTAGCATCCACATGTTCTCTTTGG
GCAACATAATCCTTATACTAGTTTGTGTACAAGTTAGAAGATAAACTGTGATAACTGGGTCTCTATCTATCTTTATCA
ATCACTCCCAGAAGGCTTCCCTTGTTTTGTCTTATTGAGAGAAAGTGCAAGGAGGGCAGCAGTTCTGTATAGACTGCTG
AGATTCTAGCAATGGTGAAAGCTTTGCCTCATCTCCTATCTTTTATGAAAAAAGAACTTTGTCTAGACCAGGTAGTTC
TTAATAGCAACTTTTAGCTCATAACATGAACAATTTTAGGTCAAAGAGATATTTTCAATGAAATGTGTGTTTTAAATGTTT
AGCAGACTCTTTTCTTTGGAATATGCTTTGCCTAATGAGTATATTTTCCAAGTGTGAATTTATCTGTAAAGCAAATTT
TTTTTAATTATTATACTTTAAGTTCTGGTATACATGTGCAGAACGTGCAGGTTTGTACATAGGTATATACATGCCATG
GTCGTTTGTCTGCACCCATCAACCTGTCTATCTACATTAGGTATTTTGCCTAATGCTGTCTTCCCTCCCTACCCGCTSA
TAGGCCCTGGTGTGTGATGTTCCCTCCCTGTGTCCATGTGTTCTCATTTGTTCAACTCCCACTTATGAGTGAGAACATG
TGGTGTGTTGGTTTTCTGTTGCTGTGTTAGTTTGTCTGAGAATGATGGTTTCCAGCTTCATCCATGTCCCTGCAAAGGACG
TGAACCTCATCCCTTTTTATGGCTACGTAGTATTCATGGTATATATGTGCCACATTTTCTTAATCCAGTCTATCACTGA
TGGACATTTGGGTTGGCTCCAAGTCTTAAGCAAAGAGTTTTTTAAACCTGTGTATGCATGACATTTTAGCTGTGCTTTT
GAGACATAGCTATGGTTTCCATACTAATGCTATTCCAAATCTTTATGGGATTTGAGAAAGAGGAGCTAGCTATTTAA
GTAATATTTTTATGGTTATACTACAGTCAAATCCTTCATCTGTCTGACCTGCAATGATAAAAAATCAGCTATTTACTT
TAAAAGGCCCAAAAGTTATGGACCAAGTGCCAGAAAGTGAGCTGGGAGAAAGAACTCAAATAATATTGAGCATCTACTA
TGTGCCAGGCTAAATAGAAGACACTTCTATATTAGCYCATTAAATTATATGATAGCCATAATTTACTCAAGAAAAATAT
AACTTTGTAAAGAGGGACAGAAAAAATTTGAAGTCTATTATAAATGTCTACAAATATTCTTAGAAGGCCCAAGTTTA
TTTTTTTCAAGTAGTTATAAGATATAATGTCTGAGTCAATACAAAGCAGTAACCTATGTTCTGTATACCACTGATGCCAG
TTTTTAAAAATATGTATTACATACAAGGGTAGAAAAAAGGCATAAAAGGAAATTTAACAATATCTGTGGTTATCTTC
CAGCAGTGGGGATTTACATTATTTTTCTTTTTTTTGGTATAGCTTTCTACATTTTCTATAGCACATGTACATTTTATAAT

[illegible]

Fig. 6. 346

352/375

TACTAACCTTAGAATATAGTTTTTTCAGTCACTTTCTTGTGTCTGCTTCTTTCTTCATATCCATTTCTCTCTCTTATT
GACCCTTTGCTCCAGCTTAGGGTGGGATTTAAATGAGAAGTTGAGGCTGCTGTAGATATCTCGGGACCGAAATGGGAAA
CTTCAGCCCTAGAGAGGACGTTGATTTTTAGTTGGTGTGATGACGGGGTTGAGTTAATAGTGTGACTGGAGCTGCCT
CCATGATAATGGGACATAGAAACTTTTAGAGTTGGCACCTCATTCTGACACCATACAGCTAGGGCGTAGTATTCTTGG
GTTCCAGCAGGACAACCCAACTCTGGTTTTGTCCAGAGTCCCTGGATCTTCTCAGAGGTTCCCATTTTTCTCTACTAGA
CATGTGAGAGTGCAGTTGCCATTTCCAGGTTATCCACTGGCAACACTGGTGTGTGATTTTTTTTTTAAACATACTCTA
TGGAGAAAATTTTTACATAAAGACAAAAATGTTAAGATGATTTTTTTTTCTACAGGAACGGGATTTATTAAAAACATTT
AAAATTCCAGTAGATACTTTAATTACATATCTTATGACTCTCGAAGACCATTACCATGCTGATGTGGCCTATCACAACA
ATATCCATGCTGCAGATGTTGTCCAGTCTACTCATGTGCTATTATCTACACCTGCTTTGGAGGTAAATCTGTTTTCTGAA
ATTTCAAGAACACTAATTTGCCACTCATAAAGGTCTATTAACTTTTTATCTGAAGGGTTTTCAATGGAGAAGATAATTG
GATTCATTGGAAGTATAACTTATTGACTTATGGGGGAAAATGCTATAGTTAATAGACAATCAAGTCTTTGATGGATTTT
GCTTATGAAAGTTGGTTCACAGATTTAGTGATTGATCTGTTTATGATATTGCTTCTTTGAAATGATCCACTGAACATTTT
ATAAGCACATCTGGCTTACTCACTTTTTGTTCATTTGTTTTCTTGAAATCTAGTCTGACGGCTTTTATTTATAGGCCA
AAGAACGTTTTATAAAACATAAGCAATATATTGATATTTTTTCATAGAATATATTAGAAGGACATACTTTAATTTTTCT
AAATCCTAAGAAGTTATTTTCATTAGTTGTTTACTAAAGCAATTTGATTTTTCTTAAGAAATATATTTTATAATTCAGTTT
GTTTTTCATTATAAAAATTATGTTAATACCTCATCATATGGGTGAGTGATTCTCAACTGGAGATGGTTTCTCTTCCCTTT
CTTTCCCTCCTGCCACCACCAGGGACATTTGGCAATGTCTGGAGGCATTTTTGGTTGTCACTATCACATTTTTTAGT
TGTAATGATACTGGCATCTTGTGGTAGAGGCCAGGAATCTGCTAAAAATCCTACAATGCACAGGACAGCCTCCAC
GCAAGAGTTATTTGGGCCCAAATGTCAATAGTGTGAAGTTGAGAAACCTGGTTTCGATGAAAGAAAATAATTGCTA
ATGTCTTACTAATTTTATGTACATTTTCAGAATATCTTAGACATCTTAAATATTTAGAAAATAAACTATTATTTCTT
TTAAAAATAATTTTCAAGATTTTAAATAATATTTTAAAAATACAGTGAATGGAAAACATTTGATCATGAGATGTAATAA
AATTAGATAAAATATTTCTTCCAAGATTATACTTTAAAGTTTACAAGTATCTAAGACTCTCCCTTGACACATTGTAA
CACATTTGAAGCTTCATTTTGTTTTCCATTTAAATCTAGAGATTTCTTATTTGTTTATACTTTTAAATCATATCATT
GTAGAATAGTAATATTTATCTATATTGTCTGATTTTCCAGGCTGTGTTTACAGATTTGGAGATTCTTCAGCAATTTTGG
CCAGTGCAATACATGATGTAGATCATCTGTTGTGTCCAATCAATTTCTGATCAATACAAGTAAGTAACTTTATTTTT
TCAGAACACATTTTTCCCTTGTACATTTTGAATGACTAAGGGTCTTTATAAACTCAGAGTCTTCCAGAGCCATAATGT
TCTTTTGAGATGTGTATATATGTGTTTGTAGTATAGTTTCATGTTAATGTAATTTAAGTAAATATCATTATATCCCT
TGAGGCATGTGATATTTGAAAATGTGTTCCAGTTCTCTTTAAAGTAATATATTGCTGTGTTACTAGACAAGGGTAAT
TAAAAATGAAAGTGTGCAGAAAGATTTAGAAAGTTGTATTGGCCCTAAAGTTTAAATTAAGAAAAGTTATGAGAAT
TAATGGTAAGTGTTCCTCACTTTATGTAGGTCATCATTTAATCCTCTTCAGAGGCCATAGCTTCCCTTCTCTCCATG
CCCAACCCCTGTTCTTTCTTTTAAATCTTCTAATAAGGGTAACAGGAACCTCTTAATATTTTCAACCATTGGT
TTTTCTCACTGTTAACATCTCACCTTATAAGAAGTCATCACTGAATTTGGAAATATAAGGAATAGTAGAGACTGTTTA
ATATGGAGCATCTCTGACATTTGCCGCACAGAAAGCCTGTGTAGGGAATGTTTAGGTAATGCTTGAGCTATCCCTTGGA
AAGAGATTTAGGTTTATAGAAATTTCTATTTGGTACTTGAAGTTAATTGGTAAGTGATTTAAGTGAACATGACTTAATT
CCCTCCCATATGGTAGATTATAAATTTAGGTAGATTATAAAATCATAAATTCATTTTATATATAAAAAATATGCAAG
TTGTTGAAAATGTTGTATGCTTAAGAAATCCACCTTTCTTTTCATTTTGTCTTGAGGCTATGAATAATAGTCTTCTCGTGC
CTATAGCAATCTAGCTATAGAATTTATTTATGAATTCACCATTTCATTTCCGTGACTTTGCTGTAGCCAGATTTAAGAAG
GAATGTAGAGGTAACTTGCTTTGAGAGATTTAATTCAGAGCTTTAGGATTATTTACCTATTTTTATATCTTATAATGG
CCTCTGGACTATCCTATAGCAAAATATACTCTAATGACTCATCCATGTAGAGGACTGGAAAAGTCAGGGATTTCTGAG
ATGTGTGCTTAGTCAAGTATTTTTTACAAGTTTAGTTTAGGAATTTATTTATCCAGATTAGACAGGATAACATTTTCAT
GTTCTAGCTACCTATAGACACCTATAATGAGGTAGCTTTTGAAGTCACTCAAGCATACATACAAATATTAATATACATT
GGATGCAGCTCCCTGCATTTACATGCTATCAGTGGGAGGTATCATGAGGGAGGGTTCATTATGTCTTTCTAAGAGA
GCAGGGAGGTTCATGCAATACAGTGCATGCTGGCACTTTACATGAGCCTGGCCTGATTTTATTTGATGCTTTTGAATGTC
TTGAGATATTCTGAATTTTATCAATTTTATGTAATACATAAAATGTATTTTACATAAAATTTTTGTGTTAAAGGTAT
ATATATATATCTATCTTAAACACCAACATTCAAAATGCTGATGTTTTCTTTGCATTCTGTTATATAGCATATTATATGT
TCCCTTAGAATTAAGAGTAGATTTAGAAGACAAATTTAAACAACCTGATAGAAAGGTCACTGTCTTCCAAGTACTCTGAT
ACATTTTTTAAGGGTAATGAGGACCTGCTCTATTCTTCATTCTTTTGAAGCCCTTAAAGCAGCAGTCTCCAATGTTTTG
GCACCAGGCACAGGTTTATGGAAGACAATTTTTCCATAAACTGGGGGCGCAGGGAGAGAATGGTTTTGGGATGAAAC
TGTTCCATCTCAGATCATCAGGCATTAGTTAGATTCTCATAAGGAACGCACAACCTAGATCCCTTGATGAGCAGTTCA
CAGTAGGGTTACAGCTCCTAGGAGAATCTAATGTCCCTGCTGATCTGACAGGAGGCGAGCTCAGGCAGTACTGATGCG
GGCTTGCTGCTGCTCAGCTCCTGCTGTCAGCCAGTTCTGACAGGCCACGACCGATATTGGTCCACAGCCGATGG
ATGGATCGGGGACCCCTGCTTTAAAGGGCACTTTGGGCTTTGACTGGCACCTGGAGGACCTGGCATCAGGGTCCCTGTG
CAGTCTGCCATTTAAGCTAAACAAGGCCCTCAGTCTACAGATGAATCTGATACCTTAAAGTTTGAGAACCAATGAAATAGT
GGAGGAACTGAAGAAGATAATTTTATCTCCTTAGGATGTCTGTTTAAAGTCATTTTGTCTGGTGACCTGCCCTGGGATGG
AAGGATAACTAATCCTGCCGCTGCAAAATCTTTCTTTGTTATTTAGTAATATTGCAATGATCTCCTTTCTGTGTGACCA
CAGCGACATAGGGAAGTTCACAGTTGCCAGAGTAGCTTTGGATTGCTAAAGTTTTTTTGACGATGAGGTGTGATGAGGC
TGTGTTATTCTGAGGGAATGAATCAGCATGTCTACTTTGTACAGGAAAGTATCCAGGGTTGTTCCGGGCCCCAGGGC
ATTATCAAAATTACAGCCTTAGTTAGTTTGGTTTGGCTAGGGATCATGTAAGAGAATTATCTTCCAGCATGCAGTAAA
GGAATCCTTCTAATAACTTGTAACTTGTGATATGTAGCTTCGTGAAATATTTTATCAAAATTTGTGCTTATTTTAGT
TTGCAGTAAACCTTTTTTAAATTTGACTTTTTATATTTTATGGATGGCTTGAGCATCCATGTGTCAAGCCAGCACATT

353/375

CTCAGCTCTTGCCTCAGAGCTGGAGCTGCCATCCTGTCCAAAGCCTGCAGCTGAATCCATATTTCTCATAATAAAGAAT
 TCTAAAGACCTCTGATTATCAAATTTATAAACCCTAGTTGGTTACTTGTCTTACTTTAAGGAAGCTACGGAAGCACTG
 AGAGCTTAAGGCACATGGGGGGCGCTGGGGATTCCCTTGGCTGGTTCCAGGGCAGTTAATCCTCTGCTTCTTACATG
 TGCTCTTCTGTTTTCTTAAATTAATTCAGTTGTTTTAGCTTTAGGTGCCAATGATTTTATACTAATTGTATTTACACTG
 GTTGAAGCATGCTGGAGGTTCTGCAAGCAGAGAGAACAATCTACCTGGTAGAGTTGGTTAAGCTATAATAAATGATT
 TGAGTGTGGGTACTGTGAACAGGATTTAGAGAAATTGAAATTTTCAAGGCAGGAAGCTGCGTAAATATTTTAAAGGATGA
 TGCATATAAATAAATCCATAGGCCAGGTGCAGTGGCTCACTCCTATAATCCCAGCACTTTGGGAGGTCAAGATGGGTGA
 ATCAGTCGACGTCAGGAGTTCTGGAGACCAGCCTGGCCAACAAGGTGAAACCCCTGTCTTTACAAAAAATAACAAAAA
 TTAGCCAGGTGTGGTGGCGCATGCCGTGATTCCCAGCCACTCAGGTGGCTGAGGCAGGAGAATTGCTTGAACCTGGGAG
 GTAGAGGTTGCAGTGAGCCGAGATCATACCATCACACTCCAGCCTGGACAAGAGTGAAACTCCATCTCAAATAAATAAA
 TAAATAAATAAATCCATAAAATGTAAATAGCAGCATGAACCTTTGAATATAAAATGCTGGAGGGTATATTTAACTTAGC
 TTTATTTTCTGAAAAAAGTATCAAAAGTACAGAATATAGCATTAATTTTACTTGGCAAATGAATTATTTTTGTTAAT
 AGCAAAGATGCCCTAAGTTTGGGGCAGAAAGATTTATTCACATTAGTGATGCATTCAAAGCATGCGGTTTTTGGTTTTCCA
 AGAGCAGAGGCATTTTATTATATTAAGGTTAAGATGTATCTAGCTGTGAGTATACACTTTTTTATTTCTCTACTTTTTAT
 TTTGAAATTAATAATTTTTCATAGCTACACTAGTAGATTGTATGTAGAATTTTATTTTTCTGTATAAACCCACACCTTCAA
 AATAAGGATAAATTCATGTTTATCAAATGTGATTATATAGATATAGCTACAGAGATTATTTTATTCAACAAMAATGTAC
 TGCAAGCCTACTAAATGTTATAAATAAATATTTTCAAGGCACCTTAGGACACATGGSTGGACAAGACAAGACAAATCCCT
 GGCCTCTTAAGAGCTGGCATTCCTGCTAGAAAAGGTGGAGCATAATAAGTGAATTTATGGCATGTGATGGTACTAAGTGCT
 ATGGAGGAAAAATAATGCAGGGTGAGGGCATAGAGAGTGGAGTGATGAATGAGGCAGTTTCTTGAACAACCTGAATATTAA
 GTTAAACCACCACTTCCCTCTGTCTATTTTATGGAGAAATGTTTGTCTTGAAGTCCCTTTGAAGATTTATGTTTATTT
 CAGTTGTAACTTAGAGACATGGTGTAGCATGCTGTCTATTTCTAACTAACTCAAGGCTAAGCCTAGTAAAGCTGTAAAG
 ACAGTGTAGTGAAGTCTTACTTACAGGATACATATCTATAGTGTCTGCCCCAGTCTTAACTGTTTTCAGCTCCAGGTCTT
 AATATTGGCTCTGATCTGCCATGTGGACTCCATCATAAGACACAAAAAGGCACAATACCTAGTGGACTTAGTTGGATT
 GGGAGGCAATGTATTCTTTCTTTGTGTGTGTTACTCTGGCCCATTTTACTAAGTGATCTGAAAAGCTGCTAGTTTGTAGATG
 GGGCACAGAACAGAGAGTGTACAAAACTGCTAGTTTGTAGTGGGGCTCTACAAACAGGTCCAGCCTGCTGTGTGAAGC
 TGCTCTGCACATGGGCCACATGATCCAGCAGATTTAATGGTGCTTGAATGTGAGTGGCAGATAGGAATGTTGTTTGGGA
 GCCTTTGACAGAGCCCTCTGTGTGAATCACAGCACAGACTCTGGAGCAAGACCCTGCCATCATCCAAAGAAAGATAACT
 AACTACTCTCTTTTGAAGAAAGATATAGGCCCTGCTGTGGGCCCTTAGGAGATACTGACTGACTATGGGCCACCAAGT
 TTCCATGTGGTTTAAAGTGTCTGCCCATCATTAATAGGGTATTATCTAACGCGCCAAGCCATATGTTGGGCATGTACGA
 CATTTTCATCATCAAATAAAGTAGTGTAAATACAGATCTATCAGGTCCGAGCAGACACTAAAGGCACAAATTACATAAA
 GAAGTGGCCCTAATGCCACTCCTATTAATTACACTGCCTTCTTTCTCCAGCCTACACATGTGGTTCGCATGGAAAGTTC
 CCTGCAAGTAGTTGACAGAGGGCCTGGTTTACGGATGGTTCGCTGTATACGCAGGTACCACCGGAAGTATACAGCTGC
 AGCACTACTGCCCTCTCTGGGACATCTCTGAAGGATGGTGGTGAAGGGGAGTCTTCCAGTGGGAAGAACTTTAGGCA
 AGGTGACTCGTTGTTCACTTTGCTTGGAGAGGGGAATGGCCATATGTGCAATTATATACCAGTTTCATGGGCCGTAGCCA
 ATGATTTGTCTGGATAGTGAGGGACTTAGAAGGAATATGATTGGAAAACTGGTGAGAAAAGAAATTTGGGGGAAGAGATAT
 GTGAATGATCTCTCTGAATGGACAAAAAAGGAATGCTCACCAAAGTGTGACCTTGGCAGAGGAGGATTTTAAATAACCAA
 GTGAATAGGATGACCCATTCTGTAGATACTAGTCAACTTGGTTCCCTAGCCACCCCTGTCTATCACCAACATGCTAAGA
 ACAAGTGGCCATGGTGGCAGGGATGGAGGTGGCAGGATGTGCTTAGAAAACATGGACTTCCACTCACCAAGGCTGACCT
 GGCTATGACTATTGCTAAGTGCAGCAATCCACCAGCAGCATAAACCAACACTGAACCCCATATAACACCATTTTGGGGG
 GATCAGCCAGCTACCTAGTGGCTGGTTGATTACATTTGAGACACTTCCATGGTGGAAAGGGTACGATTTTGTCTTAGTG
 GAAAAGGCACCTTTCTCTGGAACAGATGTGCTTCCCTGCAGTTTCTTCTGCCAAACTATGGTATTCCATACAGCATGTG
 CCTCTAACCCAGGAACCTACCTTACTGGCAAAGAAGAGCTGCACTGGGCTCATGCCCATGGAAGTCCCTAGTCTTACCAT
 ATTCCCTAACATCCTGAATCAGCTGGCTTGATAAATTGGTAGAATGGCCTTTTGAAGACTCAGTTACTCAGCTAGGAGG
 CAAGACCTTGCAGGGCTGGGGCAAGGTTCTCCAGAAGGCCATAAAGGCCATATATGCTCTGAATCAGCATCCAATATGT
 GGTGCTATTTCTCGCATAACCAGAATTCATGGGTCCAGGAATCATTGGATAGAAATGGGACTGTTACGACTCATAATTA
 CCCCAGTGACCCACTAGCAAAGTTTGCTTCTGTCTGCTGCAAAATTTATGTGCTGCTAGCTAGAGGTCTTAGTTTCAGA
 AGGAGGAATGCTTCTATCAGGAGACACAACAGTGATTCCGTTGAAGTGAAGTTAAGACCTAGCCACTTTGAGCTCCTT
 ATGCATCTGATTCAATCATCCAAGAAGGGCATTACAGTGTGACTGGGGTGACTGATCCTGACTACCAAGGGGAAATTG
 GGTTACTACTCCACAATGAAGGTAAGGAAGAGTATGTGTGGAATAAGGAGATCCCTTAGGGCATCCCTTAGTATTAACC
 ATGCCCTGTAATTAAGGTGAGCACAATAACCCAATCCAGGCAGGACCACTAATAACCCATACCCCTTACGAATGAAG
 GTTTCGGTCACCCACCAGGTAAAGAATCATGACCAGCTGAGGTGCTTGTGAGGGAAAAGGGAATACAGAATGAGTAG
 TAAAAAGAAGGTAATTACAAATACCAGCTATGACCATATGACCAGTTATAGAAATAAGGACTATAATTGTGTCATGAGTATT
 TTCTTATGAATGCATTTATATGTATATATACATATATTAAGCATATATCTTCATTTTCTTTTTCTTATTCCCTTATATA
 ACATAAGAGGTATTAACCTATCTTCATTTTCTTTTTCTTATTCCCTTATATAACATAAGAGGTATTAACCTTTATATTAG
 TATTTAAGTATTTATTTTATATCATAGTATTTAAGTTATAGGCTATCAGGATAAGAGTAAACATTACTCAAAAACTTTA
 CTTTCACTTCTGGGGAATGTGTTAGTGTGCTTTAGTTGTATGCAGGATAGTTGTAGCCTGTTTGGTGAATTTATGGCC
 TTATGGAGATTAATATGTTTAAAGGAGATGCTTTATGGGTACCAAGGTGACAAGGGGCAGAAATTTGTAATGGTTAATTT
 TATGTGTGAGCTTGACTAGGCTAAGGGATGCCAGATAGCTGGTAAAACACTATTTTGGGGTGCCTCTGTGAGAGTGT
 CCTGGAAGAGATTAGATTAGCATTTGAATTGGTAGACTGATTAAAGAAGATTGCCCTTACCATTGTTGGCAGGGATCAG
 TCAATCCATTGAGGACCTCAAAGAGAAGAACAAAAACATTGGGGGAAGGGGCAATTTTGCTTTCTCGGAGCCTGGAC

354/375

ATACATATTCTCCTGCCCTCTAACATCAGGGTTCCTGGTTGATTCTCTGGCCTTTGGACTTGCTTTCTCGGTTACACCTTT
 GCAGACATGGGACTTCTTGGACTCCATAATTGCCTGAGCCAATTCCTATAATAAAATAAATGTGTCTTTTCTCACATAC
 ACACACACACTCATACATATGTCTATTCTATTCTCTGAGAACCATGATTAATACAGAGAGAGAAAAGATTAGCACAG
 ATGAAGTACATGTTCTCAGTTATGTGGTAGTACCTGCCACCCTTCCCCCATTTTCATTAGCATCAGAAGAGAGGGAC
 ACAAAGTGGTCTTCTGCCTTCAGTAGTAGCATATGTTGGGCATAATTTAATTTATTCTTGATGATCCAGGGTAGTTG
 TAACAAATGAGCACAATTGATCTATATATAATAAAATGATGGCTTTGAGTTTGTAAAGGTATGCATGGCCTCTCAATAA
 AAAATAAATACCTTACAAAGTTGTCTTTATAAATGTGTGCCAGGCACTGAGTGGACTGTGTTGATTTCTCGGTTTCATGTT
 TAGTGTTCAGTCTCAGGTTTTTACCTCTATAAGGTACTTGTAATCATAGTCAGTATAAGGTGAGGGCTCTAGAAAACCTG
 CCTGGTTTTAAGTGCTGGCCCCAGCACTTACTGGCTAGGTGATGTTGGCAAAGTTACCTACCTTCTCTGAGGTACATTT
 TCTTCATTTGTACAGGATTATATGAGTATGTCTATGTAAATATTTATGTGTATAAAAGATGTCCCCAAGGGACATTTTC
 TATCCCCCAGCCTATCCCAAGGACACAAAGACTTACTTCCACCTATATGGCTCCATGCCATCCATGAATGGAACATAG
 CCTTAAATGTGATAACAACAGTATCTTCTTAAAGAGTTATGAGGATTAATGAGATGATTACATAAAACCATTTAA
 CACAATGGCACCTAAATCCTCTAAATGTTGTGCCTTGCTGTATTCTGTGTTGTAAGTTTGAATAATTGAAG
 TGCCTAGGGGAAGCCAGATAACCAACATATTAAATTAATAACCTTTAATATTTTGTAGGGGCTTAAGTCTCTAAGTAG
 GTTGGGAGGGTTTGGGGAGGAACGATTAAAAGATTTGTAGAGATAAAGACAAAAAGGTAGAATGCGATACATGCTAAA
 TGGGTGGTACAAAGTAGTATAGAAGTTTACAGGAGAAAGTGGGCAGTTTCATCTGGTAATTAAGAAAGACTTGATGGAA
 GAGGTAACCTTATATTGGGCTTGAAGATGAAAGGGTTTCAACAAAAATGTTATATAAGCTAACCTCTTTGCCCCCTCTGTG
 CTGTGCACTGTACCATCCTGACAGCAACTTCTGATCATTCCTGAACCTTCAAGGACTCTACTTACAAGTAATGGATTA
 GTGTCTTTGATGAAAATCTGCTGAGGAGCTGCAGACTCCTACCTCCCAATTTAAATGTGACCATATGCCTTCAGTCCTA
 AAGAAGAGTAGAAAGTTAAATAACTTCTTGAGATTGAGTTTCTTAAATGCTAACATTTGTTTCAATTTAAAAATCAACAG
 TCACCACCCTTCTCTGTAACAGCATCTGAGATGGAAGAGGCTATGGAGGCTGCCAGTCCACTAAGGCATCCTTTCTCT
 GGCCTTTCTAGCCAACTGAGACTCTTTAAGTGTGAGGATTAACCACTCTCCAAGACAGGCCTTGCCAGTATTCTTGGA
 CATCTGCCCTACATGAAAGGCCCTACTTATATCCAGTAGAAGTCAAGCTCTTTGTTGCACCTTCCATACAACAGATCAC
 CCTTTCTCTGAAAGGAGCTCATCATCTTATTCTTTTGCAGGGTCAACAGCCTTAATTTCTTACCTTCACCTTCAGCTTCA
 TATAAGCCAATTAGGGTTTGTGTAAGGCTAAGTCAATCTGTTAACACTGCTTGTCTACATGCATATTTCTTCTCTTAA
 ACGAACTCTAATAATTATCCAGTATCTAATAATTATGCCTTCTTCAATATATGTTTGTGTTTATTTGATTCCACTGTAG
 AAATACAATAATATGTGCTAAGAACCTATATAGTTTAAATTTTTCATTTCTATATGCTTACCTATCTGTAGATAAAGG
 TTCATAAAGGCATTTATAGACACTATAAAAGTTTACCAGAACTGCCTTTTAAAGATAAAACACTATTGTTTTATCTAA
 AGAAAACAAAAATAACAAAAAAATACTGTACAAACCTACTCCCTACTAGTCTAAACAGCTCTGCTCCTGTAGTTTGGG
 AGCAGAAATTTAAGTGTGCAATTTGTATTTCTATAGTTCCGATAAAATAATAGAATTTCTCAGTTGAAAATGTCTTAA
 GCCTCTCCTCTCCTTCCCTAGCTCCATTAATAAGTCCATTGAATAGTATTGGGTATTTCTTTCTTAAAAAAGATATATA
 TTTCCAAATATATTTCTATGCAATTCGTTATATATTTCTATGCATTGTTAGAAAAAAGATCAAAATACCTGTGCTTTT
 AACCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTGAACAGAGTCTTGCTCTGTTGCCTAGTTTGGAGTGCAGTGGCAGGATA
 TAATGGCTCACTGCAGCCTTGAACCTCTGGGCTCAAGCAATCCTCCTACCTCAGCATCCCAAGTAGCTGGGACTACAGG
 CAGGCCCTACCATCCCCAGATAATTTTTTATTATTTGTGCGAGATGAGGTCTCCCTATGTTGACCAGGCTGGTCTTGAAC
 TCCTGGGCTTAAGCAATCCTCCTGCCTCGGATTTGCTTTTAGTCTTTACAGTGATTAAGTGGAAAAGAGAATAAAGCATC
 AAAAGTTTTTAAATGATTATCTTGTAGCTCTGGGTCTGCTATTTACAAGAAGTAGGAGAGAGGCAGAATCTCTCCCTGC
 CTAAATCTACAGGCTAGGGCAGTAGGGAGAGAGTGGCAGAATCTTACCAGAGGGTATACAGACAGCCAAACACAAC
 ATCATGTGAAAGCTGTGAGCAAGCAGGCAGGAAGCAATATCCCTGTACAGTATACAATGACTGCCACGATACTTGGA
 AAAGAAAATGGAAGCAATGAATAAAGCTTGGACTTTCAGAGCTATACATGAGCAATGAGCAATCTAAACTTGTTCAT
 TATGATTCTTATTGTTCTTGTACCTCTTTGAGTACAAACAATCTGTAAACACAGGATCCTCACTTTATATAGTCGAG
 GGTAGGTAATTCACAGTTATCAGGAATACAAAACCTTATGCTCTGGATGTGTTATAGATACTAAGAATAATGTCTATATT
 CTGCTGAGCTCATGGCACTCTAGAGGAGAGGTTAAAGATCCAATTTCTTCACTTTAGAGAAAAGCTGAGACCTACAGAG
 TGAAATGACCTGCCACATGTTAGTAGCATTAGAATTAACCTCCCAAGATTCATTCCAGTGTTGTTCTGCTCTTATGTT
 ATCTGATTTATTCTCTCCTGGATATTGTCAGGTAATGATAAGGGCAGCAGAGAAAGTTAGGGGAAATTACATCCTAAAT
 CCAGAATTTTAAGAATCAGATAAACTTCTCACAACAGTTTTGCTGATCTTTGGCCTTTTGTCTTTTTTACAGACTCTG
 AACTTGCCTTGATGTACAATGATTCTCAGTCTTAGAGAACCATCATTTGGCTGTGGGCTTTAAATTGCTTCAGGAAGA
 AAAGTGTGACATTTTCCAGAATTTGACCAAAAAACAAAGACAATCTTTAAGGAAAATGGTCATTGACATCGTAAGTAGC
 TGATAAAAGCCAAAGAAGAGAACTGTGATGCAAGTTGTTTATAATTTAGACATAAGAACAAGATGAGTATTAGGTAAAA
 GGAAGTGCATTTCAAAACATATTATGGCCCTTTATGTTATAGAAGCTGCCCGTGATGCTGGCTGTGATGTTCTGTAATA
 GGTTTTTCACTTCTAGCAGTTTGGACTTGAGAATAATGTGAGCTCACCTCATCATTTATTTTCTGGGCCCCCTCCAGTC
 TGGTGGCGGGCAGAGAAAAATGACTAACAAAAGCAGATTGTGTGGGCCACAGCTCAAATGGATTTTTTCCCCACCTTTT
 CTCATCAGTAGACAGTGCCATTTAGACATCCATGACTTTACTCTTTTTTCTATGCATCTTATTTCAGTGATTATGAGACA
 CAGGAAAATCTCTAGCTTTCAAAAACCTTATAAATTTGTGATGATGTTTATCCATGGAGATGTCACCCATTTTTTACCA
 TGAAAGTGGTTGTGAGTGCCTAGCATTTCTGTATATTACACACATTTATCTGGGCTTTGGGAAAACCTTGATAGCAAAGG
 GGAAAAGACTCTGCCCCCAAGGAGTAGTAAGGATTTTCCACTGTCAATTAAGGCATAGTGTGTTTATTCTTTTCTC
 ATTCTTATATTCTGCGTAATTTTTCATGTTAAATTTCTGTTTCTCTGAACCTTAATAATACTCTATATTTTAAAGG
 ACTGTCAACAGATATGTCAAAACACATGAATCTACTGGCTGAGTTTGAAGACTATGTTTGAAGTAAGAAAGTGACAAGC
 TCTGGAGTTCTTCTTCTTGATAATTATCCGATAGGATTGAGTTAAAGCCTTGTGTTGAGTTTGTCTGTGTGTGTGTGT
 CTGTGCACATGTGCACATGTCTGCGTGTTCAGCTTTGATAAGATGATTTCTTCTCTCCACCTTATACTTTTCAGCA

355/375

ATTGTAGGAGCAGGATTTTTTATCCAAATTTTTTATCTCTGAGAATTAACCCAGGTAAAATTTCTACTGGTCTTTCTGTTTGCAT
CTACATTAATTAACAAAACTAACAAACAAACACCCACAGAACCCAGCCACTTAAGCAGCTCTGAATCTAGTCAGCCATG
CACATAAACAGTTCCTCTTAAGCTATTTAGATGCAGTAGAAGTGGCATAATTTGGAACATTATAACAAGTGTGAACTA
TACACAGACACATCATGGTTGAGCTGTTTGGAATAAATCTTACACTACGTGTATTTTAAAGTGYGCAGTCATCCAATG
TGAATTTCTAGTTTTTTTTTTTTTTTTTTTTTAAAAAAAAGGAACAGGAGTGAATAGAGAATGCATCCATCTATTTTAGG
TTCTTCAGAATATGGTGCAC'TGTGCAGATCTGAGCAACCCAAACAAAGCCTCTCCAGCTGTACCGCCAGTGGACGGACCG
GATAATGGAGGAGTTC'TTCCGCCAAGGAGACCGAGAGAGGGAAACGTGGCATGGAGATAAGCCCCATGTGTGACAAGCAC
AATGCT'TCCGTGGAAAAATCACAGGTAATGCATGAAGTGTATAGCTTTTCAGAGAGAAACAGAGCTACCGCTTTAGCATT
GGTTACTTTGTATTTACATATGATAGTATTTTACTGGATTTTTTAAAAATTACTTTGTTTTTGGACAAGCTCAATTTACCTT
AGTATTTATGATCCAAAGAACTTTCACTCTTATGACTTACATTCATATAGTCATATATATATTCTAAAGACATATTCAT
TTATTTAGTACTATATTCATTTAATATATTCATATACATAGAGCACATGGCATTATTTTCACTTATCTGGATTACCTACA
AATGGTGAATTGTAAAAAAGCCCTACCATTGTCAACAACACTGGAAAATTTTTTATGCTATAGAACATGCTCTTTAACCAA
AGGTTCTAGAAAGCTAATTTTGGCCAGCTAGTAGCAACTACTTTACTTTAAATGGTCTGTTGTTGTTGAAAATAGTGACAA
TTTTACCAAACCTAAGTTTTAGTAGTCTTCTGTTTCACTGTTTATTTGTTGGGCCATGATCTAATTAAGCTTTTTCCATTGTT
TCTTAGTCCCAAGTCCCTCTACTCATACTGGATTTTTTTTCTTAACTAGGTGGGCTTCATAGACTATATTGTTTATCCCTT
CTGGGAGACATGGGCAGACCTCGTCCACCCTGACGCCCAGGATATTTTTGGACACTTTGGAGGACAATCGTGAATGGGTAC
CAGAGCACAAATCCCTCAGAGCCCTCTCCTGCACCTGATGACCCAGAGGAGGGCCGGCAGGGTCAAACCTGAGAAATTCC
AGTTTGAACCTAACTTTAGAGGAAGATGGTGAGTCAGACACGGAAGAGACAGTGGCAGTCAAGTGAAGAAGACACTAG
CTGCAGTGACTCCAAGACTCTTTGTACTCAAGACTCAGAGTCTACTGAAATTTCCCTTGATGAACAGGTTGAAGAGGAG
GCAGTAGGGGAAGAAGAGGAAAGCCAGCCTGAAGCCTGTGTATAGATGATCGTTCTCCTGACACGTAACAGTGCAAAA
ACTTTTCATGCCCTTTTTTTTTTTTTTAAAGTAGAAAAATTGTTTCCAAAGTGCATGTCACATGCCACAACCACGGTCACACCT
CACTGTCTATCTGCCAGGACGTTTGTGTAACAAAACTGACCTTGACTACTCAGTCCAGCGCTCAGGAATATCGTAACCAG
TTTTTTCACCCTCCATGTCATCCGAGCAAGGTGGACATCTTCACGAACAGCGTTTTTTAAACAAGATTTTCACTTGGTAGAG
CTGACAAAGCAGATAAAATCTACTCCAAATTATTTTCAAGAGAGTGTGACTCATCAGGCAGCCCCAAAAGTTTTATTGGAC
TTGGGGTTTCTATTCCTTTTTTATTTGTTTGAATATTTTTCAGAAAGAAAGGCATTGCACAGAGTGAAC'TTAATGGACGAA
GCAACAAATATGTCAGAAACAGGACATAGCAGCAATCTGTTTACCAGTAGGAGGAGGATGAGCCACAGAAATTGCATAAT
TTTCTAATTTCAAGTCTTCTCTGATACATGACTGAATAGTGTGTTTCACTGAGCTGCATGACCTCTACATTTTGTATGA
TATGTAACACAGATTTTTTGTAGAGCTTACTTTTATTATTAATAGTATTGAGGTATTATATTTAAAAAAACATATGTTT
AGAACTTCATCTGCCACTGGTTATTTTTTTTCTAAGGAGTAACTTGCAAGTTTTTCACTACAATCTGTGCTACACTGGAT
AAAAATCTAATTTATGAATTTTACTTGCACCTTATAGTTTCATAGCAATTAACCTGATTTGTAGTGTATTCATTGTTTGT
TATATACCAATGACTTCCATATTTTAAAGAGAAAAACAACCTTTATGTTGCAGGAAACCTTTTTTGTAGTCTTTTATTA
TTTACTTTGCATTTTGTCTTCTCTTCCAGATAAGCAGAGTTGCTCTTACCAGTGTTTTTTCTTCATGTGCAAAGTGA
CTATTTGTTCTATAATACTTTTATGTGTGTTATATCAAATGTGTCTTAAGCTTCATGCAAACCTCAGTCATCAGTTTCGT
TTGTCTGAAGCAAGTGGGAGATATATAAATACCCAGTAGCTAAAATGGTCAGTCTTTTTTAGATGTTTTCTCTACTTAGT
ATCTCCTAATAACGTTTTGCTGTGTCACTAGATGTTTCAATTTACAAGTGCATGTCTTTCTAATAATCCACACATTTTCT
GCTCTAATAATCCACACATTTTATGCTCATTTTTTATTGTTTTTACAGCCAGTTATAGTAAGAAAAAGGTTTTTCCCTT
GTGCTGCTTTATAATTTAGCGTGTGTCTGAACCTTATCCATGTTTGTCTAGATGAGGTCTTGTCAAATATATCACTACCA
TTGTCAACCGGTGAAAAGAAACAGGTAGTTAAGTTAGGGTTAACATTCATTTCAACCACGAGGTTGTATATCATGACTAG
CTTTTACTCTTGGTTTACAGAGAAAAGTTAAACAGCCAACTAGGCAGTTTTTAAAGATATTAACAATATATTAACAAAC
ACCAATACCACTAATCCTATTTTGGTTTTTAATGATTTTACCATTGGGATTAAAGAACTATATCAGGAACATCCCTGAGAAAC
GTTTTAAGTGTAGCAACTACTCTTCTTCTTAATGACAGGCCACATAACGTGTAGGAAGTCCCTTATCACTTATCCTCGAT
CCATAAGCATATCTTGCAGAGGGGAACCTACTTCTTTAAACACATGAGGGGAAGAAGATGATGCCACTGGCACCAGAGG
GTTAGTACTGTGATGCATCCTAAARTATTTATTATATTGGTAAAAATTCTGGTTTTAAATAAAAAATTAGAGACTCACTCT
GGCTGATTTCAAGCACCAGGAACCTGTATTACAGTTTTAGAGATTAATTCCTAGTGTTTACCTGATTATAGAGATTGGCAT
CATGGGGCATTTAATTCTGACTTTATCCCAAGTGCAGCTTAAATAAGTCTTCTTTACCTTCTCTATGAAGACTTTAAA
GCCCAAATAATCATTTTTTACATTGATATTCAAGAATTGAGATAGATAGAAGCCAAAGTGGGTATCTGACAAGTGGAAA
ATCAAACGTTTAAAGAAGAATTACAACCTCTGAAAAGCATTATATGTGGAACCTCTCAAGGAGCCTCTGGGGACTGGAA
AGTAAGTCATCAGCCAGGCAAATGACTCATGCTGAAGAGAGTCCCCATTTCACTCCCTGAGATCTAGCTGATGCTTAG
ATCCTTTGAAATAAAAAATTATGTCTTTATAACTCTGATCTTTTACATAAAGCAGAAGAGGAATCAACTAGTTAATTGCA
AGGTTTCTACTCTGTTTCTCTGTAAAGATCAGATGGTAATCTTTCAAATAAGAAAAAAATAAAGACGTATGTTTGACC
AAGTAGTTTCAAGAATATTTGGGAACTTGTTCCTTTTAAATTTTATTTGTTCCCTGAGTGAAGTCTAGAAAGAAAGGTA
AAGAGTCTAGAGTTTATTCCTCTTTCCAAAACATTTCTCATTCTCTCTCCCTACACTTAGTATTTCCCCCACAGAGTG
CCTAGAATCTTAATAATGAATAAAATAAAAGCAGCAATATGTCATTAAACAAATCCAGACCTGAAAGGGTAAAGGGTTT
ATAACTGACTCAATAAAGAGAGGCTCTTTTTTTTTTCTTCCAGTTTGTGGTTTTTAATGGTACCGTGTGTAAAGATAC
CCACTAATGGACCAATCAAATTAAGCTGAGAAAGGCTCAATATCCAAGAGACAGGGACTAATGCACTGTACAATCTGCTTATC
CTFGCCCTTCTCTCTTGGCCAAAGTGTGCTTTAGAAATATATCTGCTTTAAAAAAGAATAAAGAATATCTTTTACAA
GTGGCTTTACATTTCTAAATGCCATAAGAAAATGCAATATCTGGGTACTGTATGGGAAAAAAAATGTCGCAAGTTTGT
GTAAAACAGTGCATTTTCACTTGGCAAGTTACTGAACACAAATAATGCTGTGTTTAAATTTGTTTTATATCAGTAATAAAT
CACAAATAATGTAGATAGAACAATTAAGACAAAGGAAAGAAAAAATGAAATGAATGGATTTTACAGAAAGCTTTATG
ATAATTTTTGAATGCATTATTTATTTTTTGTGCCATGCATTTTTTTCTCACCAAATGACCTTACCTGTAATACAGTCT

[illegible]

Fig. 6.35

357/375

CTCCAGATTGACTGGGGAACTTGGAGTTAAAGAGCCCCTGACCCCTAAAAAATTATAGAAAATGAAAGAAGCTGTCAA
GAAAGTAAGGAGCAGAGATAAGAGCAGAGATGGGAGYGTGCTCTGCCCGGCAGAGACTCACAACATGAGGCAAGACAG
ATCTTAGCTGAACCTTCTTGACAGGATGTATGCCTCAATGAAAGGAATGGAGCACGGGCAGCATCCGGCTTAGGCTGGAGC
CCCTTCAACCATCATGGCTGTTTTAGCAGGGTGTGTGCCAGCTGCTTACAAATCCCAAGCCAACAGACATGGTTTTAGG
ACCTGAATCATGCAACATATTTTTCTGAAAGGTTCTATCACCTGAGAATTGCTTTTTCTCTTCGCTCCTTGTTTTTGAACC
AAAAAGCCGACCAAAATGTATAGTGGCAAACTTGTCTCAGCACCCATCCATGCAAGGCACGTGTGTACCACCAGGCTGC
ATCAGTTAGAGAACCAAGCCGTCTCTCACCTTGACGCTTCTTACACTTTTGCTCATTTTTCTCTCTAACACTGATGGTTT
CTGTTTTCTGCTATTACAGTTACAGCATCTGGGAAGAGAGTGGCAGAGAACGCCAGGCAACTGCACCCTGCCACAGTGGG
TCAAGCGGAGGCTGGGTGGTGACACCCGTCTCTACCCAGCAGAAGTCAGTGGTTTCATGGGTGGAGAACAAGCTCAGGA
CAGCTGCTGCAGTCCAGGGAAGTGTCCACCATAGAGACTCTTGGGAAGCAGCCCCTGACCCCAACCCCTGTGCTTTTT
TGAAGCCGTGTCTGGTATCACATGGAATTATGCAAGTAGTCATAGAATATCTTTGAAAACCTATATTCTAAAAATAATTG
CTGAGATCAGCGATTAAATATCTAAATAATGGACTGGAAAAGTTGAAAACAAGCAAAGGTGAGAGAAAACAATTGAGG
AAAACCTGGGAGAAAGTGAAGGAAGTTGGACCCCTTGTACTACAGCATCCAAGGACAGTGATGATATCTTCTGTTCCCA
CAGGACCCAGGTTCTTGGGTGCTTAAACGTAACACATAAGGCCCTTAAGGATCTAATCAAATAAATCATCCCCAAGTCC
TCCCATCAAGCCCATAGATATCCCTGTGCCCTCAGCTAAATGCTGCCCTTACACCTTGCCCTTACATCTCTCTGCCTG
GAAAACAGCTCATCCCTCTTGATCCAGTTTAAATACACCTTTGTCTGGAAAGCCTTTCCATTAGTATTTTATACACAA
CCCTATAATAAATATTTCCCTTAATATGTTGTATTTTTTAAAAAATCTTTCTCTCACTAGATTGTGAGATTTTTAAT
TTTTATTTTTTTAGACAGTCTCACTCTGTCCCTAGGCTGAAATACAGTGGCGCAATGTTGGCTCACTGCAATCTCTGC
CTCCTGAGTTCAAGTGATTCTCCTGCCCTCAGCCTCCTGAGTAGCTGGGATTACAGGCATGCATCACCACGTCCAGCTAA
TTTTTGTAATTTTTTAGTAGAGATGGGGTTTTCGCTATGTTGGCCAGGCTGGTCTCGAATCCTGACCTCAGGTGATCCGC
CCACCTTGCCCTACCAAAGTGCTAGGATTACAGGCGTGAGCSACCACGCCTGGCCTAGATAGTGCAATTTTTAAACATC
AATGTATTCCTTTTTTGCCCTGCTAGTAAGGAATTAAGTCCGGATATTAACATTTGACTATTCTTTCCCTCTAACACCAA
CTCTTCTCAAAATGTGGTCTTTGAGCTGACATTAACGTCAACTAGGATCTTGTTAGATTATAATCTAGCCCCAGACCAA
GGCTCCAGGAAAAGACTCTCTAGGGGTGGACCCTAGAACCCTGTGTTTTAACAAAGGACTCCAGGTGATAAGTATGCTCCA
TAAAGTTTGAGAAACACTGTTCAAGACATCATGGAGGTGTTTTCTATTCTGTTTTTTTTAAGAAGCAAGTTAATAAT
CTCAACCACCTTCTAATGTATTTTCAATTAATCAAAGGATACCTGTTGCTACAGGAGTTACAACAGATGACCTAGTGA
GGGCCACAGGCAGTCTGAGGAACAGTAGGATCCCATTGTTGGCCAATGTCTATCAAGCAAGAAAGGAATAGTGAAGCCA
GCTATTAGCTCCCTTCAGCAGAGGAAACCTGGGATTAGGAGTCGCCATCAGGCATCATGGCATCACAAGCAGGCATGGG
TTRAAGATTTAAATGTTGCAAAAAGAGAGAAGAACCAGAAGGAATTACGTCCACATTATCCCTGCAAGACCATTAATG
TAATGAACAGAAATCAAAACACCTTTTCACTCTTCAAGTGCCGATTACAGGTTCACTCTGCTAATCACACAGCTGAGTGG
CCCTCTGCTTTTATAAAGTGGGTGAAACCACACATCCCACCCCAAGATGGCTTGGGATCTACCATCACAAGGGGCCACCA
AAGGGCCAAATAACACAACCCCGAAATTCAGTGGTGGTAACTCTCCATGGGGTTAACTTTGATTACTGGGAAACTAGAA
ATGGGAAGGAGCCAGTAAATTAATTTCTTCTCTCCAAGACTATTCTGAGGCATAGCCTCCCCCTTGAAGCCCATCAGG
ATGATCCTGCAGTTCATGTGCAAGAGCGCCCTACCAAGTGACCTGCAGTGTCTCTTGGCTGCTCCTTGTGAGTCAG
TAGCCAGCAGAGAAATGTTTTCCCTACTTTCTTTATTTCTTTGTTCTTACTTGCTTCATTTTGCCTTGACCTTTTTTT
CCTCACCCCTACTACCCAAAGGCATGTACTTCCCAAATAAAGTCTGTCACTCTGATCCCTCCCTCAGACTGTTTCCAGG
GATGCTGAGCACCCCTGTACATTACAGAAAAGCAGATGTCAAATTTCTGTATATATATTGGAGTGCACTAAGTATTTAAAA
TCAACCTTTGGCTATTAGAGGTAGGGACTGTGCCTTATGCATCATTGTTTTTCCAGGGCTTAGTTCAGTGTCTGCCATA
TAGCAAGTATTATTTAACAGGAAAAGAGAAAAGACAAGTGGGTAAGTAATTGCCTGAATGAATGAGGTGATGGTGAAG
AATGGGTGGGAAGGGCATGAATTGGCCTAGAATAGATTAGACATTAAGTAAGCAGGAGTCGAGACAGTTAAGGGCCAA
AGGCAGCTGAAAAGAATATGGAACAGGAATACAAGTTGAAGGAATCAGGCATTCTCCCTAGAAACAAGGGTACGGGAA
GGGTAAGAGACAGACACTTCACTGTCTGGGAATTTTATCCATACTCGTTATTAAAGACACACTTGGTTGCCTACTTAA
TTATTACCAACCTCCACCCCACTTTATTTCTGGCATAACATAAGTGGGATTTTGTTCAGGTGCTGTGAAGTCAAGTCT
TCCAGGGAGATCCAGCCTCTCCTCAGTCTGTAGGCTAATTTCTGAGCCTTTTATGGTAATTCCTCTACCCCTTGCCAGTG
ATTAGGTTAGGACAGGCTTGCCGTGCTGCAATAGTAGACAGTGAGACACAGGTTGACTTCTGGGAAAATATCCCCAAGT
CTTACAAAGAAAAGAGAGAACAAGACATTTTTTCTTGGGGCTTTGGAAATTTATTTTCAAAGATGTGATGGTTAGGCTA
TTATCTTGAGGCCAGGAAAGGAACATCTGAATACACAGACAACATACTGAAAATGGCAAAGCAGAAAGTTAGATAGCAC
ATGAGTCTTTGAAGATGTGTTTGAGCTGCTGAACTAATCAGCCCTACTTTGAACTTATTAAGATAATAACTAGTTATT
ATTTAAGCCATTTTAGTTGAACCTGCTATTATTTGCCCTGAAACAATCCTAACTAATACTGTTAGTCCATTTGTAT
CGTTATAAAGGAATACCTGATGCTGGGTAAATTTATAAAGAAAGGAGGTTTATTTGGCTCAGAGTTCTTCAGGCTGTACA
GGAAGCATGCACGGCTCTACAGCTGCCCTGGCTTCTGGTGAGGCCTCAGGAAGCTTTAACTCATGGCAGAAAACAAGGGGA
GCTGGCGTATCACATAGTGGGAGGAGGTGGCAAGTAGGCAGGGAGGAGGTGCCATGCTGTTAAACAACAGCTCCTTCA
TGAATAGAGTGAACAACTTATACATTACTGCAAGGACAGCACCAAGTGGATCATGAAGGATCGTGACCCAAACACTTCCC
AATAGGCCCCACCTTGAATATTGGGGGATCAATTTCAACATGAGACTTGGAGAATACAAATATCCAAACTATATCATAC
ACCCACTCTTTGTTCCAACAATGTGCTGGTGAGTCTGGGCTGGGARTGGGGGAGAAAGGTACCTGGCACAGTGGAATG
TTGGAAATTTGACCCCAAATTAGCTGGGTGACCTTAGGCATGTTAATTCATCTCTACTTTCTTTTCAATTTTAAATAGGGG
AATTATAATATTGGAATCTTCTCTACATTCTTACAGTATTAGAGCAAATGAATTTATAAATGTAAACTCAGTGTAAC
TTTAGATAAAATTTTTCAAACACTAAGCTTGTGACCCAGAGTAGATAATAAAGTCAAAGATGGTTGCCATGAGCATA
ACCGTGAATTTAAATAGAAATAGAGAATATCACTGTGTGCTGCACATAAGTTTCATTTCTGAAATTGCTTTTCAATTACAT
GCATGCATGGGTGCACTTGTGTGCTTGCACACACATGCAATGTTGCCAAGTAACTATTTTTTAAAGCATACGAAGCA

358/375

TGGATTTAGAACAAAGTCAACACCAGAGACAACTAGAGGAACCTAAGTCTCTACCAACCCCCACCCCTGCCAATTTAC
CTGTCATCCATGATTCAAAAATGGTTTCTAAAGGGAAATAAAATGATTCAAAAGGGAGACCTAATGAGTAACATAAT
AGGGAGCCATTGATTGTTTTAGAGTGGTATGACGGAGCAGTGGGTAAGTAGATCACTCAACACTGGGTATTTTCAGACTGC
CAAGAGAGGAGAAAACAGACACAAAGTGATTTCTGGGCTTTTGACAACCTTTTTTTTTCTCAAAGTAGATTGACAAATATT
ATGTGTCATCTTATATATATTAATAGACAAAGGCAATATCTACACTTGGGAATACTTCATGGAAGGCTTGGCTGGAAAC
TAAAACTGGACTATAAACTTCTTGGGGGTTAGATACGTATCTTAAGACTTCTTGTGTCTTGAATTGTGCCTAGCCTA
GTGCTGCATAGATATGTAAGCCACTCATTCTTGTGCAATTACCTATTGTAGAATTTTCAGACTAATATATTTCCCTTTTC
CTTGTTTTGATCCTCTGCTGAATCATGAGAATAGTTCTCAGGTGAACAGCAGTGATGTACAGTGTCTCACTGGAAAAGC
AGGAAAATAATCAGATGTACCCAGAACCTTAGGATATGGGAGGCTCTTCTACTGGCCACTCCATGGGAAAACCTCGCTTG
CTTTGGGGGACAGTTTGCTTTGCTCTATTTTGTGGGCACAGGGTTTTGCCTTATTTTTCTACTCCCTTATTTCCAGCAA
ACATCCTAAAAAGATGTGGGTAAAAGAAAAAGAGAATAAATTTGCAATTCTACTCACTGGCTAGAAACAGACAGAGAC
ACATGAGTAGAGGCGGAGTTTACCATCACCTTAATCATCTGGGGCCCATGTGTGTATAAAAGGCAAGAAAAGAGCCA
TTACCAGGAGGCACTCACCTTCACAGTTTCCACCGCATAATTCCACCCCTCTGTATCAAACACCCAAATGTACACC
AATCACAACGTGCCCTCTTGTTCAAAGAAAATAATATCATGGATTTCTTCTGGCAGTCTGCTATTGATTGTTTTTGT
TCTTTTAATAAGCAAGGTGAGAAGGTTAGAAAAAATTATTAGATAATTCACCTGGGAGTAGGGTAGGAACTTGAGGC
ATGCAGAGAGAATGGCAAATTCAAAATCAACTAAGCCATAACTGCCTATCTACTGACCACTGTGCCAGGTACCTCAAA
AGAGTAGGACTTGATTCTTCTTTTGGAGGAGTTTCAGTTTGGTTGGAAAAGGAATGGGGGAGGGGCCAAGTACAGTGGC
TCACACCTGTAATAGCAGCACTTTGGGAGGCCGAGGTGGGTGAATTGCTTGAGCCAGGCATTTGAAACCAGCCTGGGC
AACATGGCAAGACCCACATCTACAAAAAATACAAAAATTAGCTAAGCATGATGGTGTGCACCTGTAGTCCAGCTACT
CGGGAGGATGAGGTGGGAGAATCACTTGAGCCCAGGAGGTTGAGGCTACAGTGAGCTGTGAACATGCTTCTGTGCTCCA
GTCTGGACTACAGAGCAAGACTCTGCCTCAGATAATAAAAAAATAAAAAAGGAAAAAAAAAAAAAGAAATGGGGAATGGA
AGAGGAAGGAATCCAGGGGAAGAATGATCACTAAGACTGCATCACACCTTTTGCTATCTCATTCACTCTACATCAAC
CCAATATTCCCTTCATTTAACAGAGAGGTCAAAGAGGCTGGAAGGATAAGGTTGTCCAGTAAAAATGTCAAGGCTGAT
ATGGGAACATAGCCAGTTTGTCTCTAAAGTGCCCTGTGTCCCTTGGGGAAGAGAATATTTAACTTGATTGTTGCTTCAG
TTTTTTATTCTATGTCAGCTATCAGTTTGAAGGCATTATTTAGGGGATTTCTTTTACTTTCTTTTTTTTTTAAATCTCA
AATTTCCCTCTCATTAGTAACGTGTAATTTAGTGCCCTAACATGTAGGACAAAAATACTTTCCATATTTTTTTTTTCAAAA
TTTTTGCACTGACTGTAGTCCCTCACTGGAACAGCTTTATTTCCCTAAATAATATACAATGAACCTGTTCATATCGAA
GACGTATGCCAATATTAAATACAAACAGCTCAGCTGGGCGTGGTGGCTCATGCCTGTAATCCAGCACTTTGGGAGACT
GAGGCAGGTGGATCACCTGAGGTGAGGAGTTCAAGACCAGCCTGGCTAACATGGAGAAACCTGTCTCTAATAAAAAATA
CAAAAATTACCCAGGTGTGGTGGCACATGCCTGTAATCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCACTTGAACC
CAGGAGGTGGAGGCTGCAGTGATCCGAGATTGTGCCACTGCACTCCAGCCTGGGTGACAGAGCAAGACTCTATCTCAAA
AAAAAAAAAAAAAAAAAAGGTGGCTGACCAGATGGCCAAAAGGAACAGCTCCAGTCTGCAGCTCCAGCAAGATCA
ATGCAAAAGGTGGGTGATTTTTGCATTTCCAACGTAGGTACCCAGCTTATCTCATTTGGGACTGGTTAGACAGTGGGTGC
AGCGCATGGAGGGCGAGCCGAAGGAGGGTGGGCCATTGCCTCACCCAGGAAGTGCAAGGGGTCAAGGAATTCCTCCCC
TAGCCAAGGGAAGCCATGTGGGACTGTGCCTTGAAGAACAGTRCACTTCGGCCAGACTACACTTTTCCACAGTCTTC
GCAACCCACAGACCAGGAAGTTCCCTTGGGTGACTATGCCACCAGGGCCCTGGGTATCAAGCACAAAACCTGGGCAGCTG
TTTGGGCAGACACCAAGCTAGCTGCAAGAGTATTTTTCATACCCAGTGGCACCTGGAATGCCAGCGAGACAGAACAGT
TCATTTCCCTGGAAAGGGGGCTGAAGCCAGGGATCCAAGTGGTCTAGCTCAGCGGACCCCAACCCACAGAGCCCAGCA
AGCTAAGATTCACTGGCTTGAAATTTCTCACTGCCACCACAGCAGTCTGAAGTCAACCTGGGGCACTCGGGCTTGGTGGG
GGGAGGGGTGTCTGCCATTACTGAAGCTTGAGTAGACTGTTTTCCCTCAGAGTGTAAACAAAGCCAGGGGGAAGTTCC
AACTTGGTGGATCCCTCCGAGCTCAGCAAAGCCATTGAAGCAGACTGCCTCTCTAGATTGCTCTCTGAGCAGGA
GGGGAAGCAGCGGTGGGCACAGCTTCAGCAGACTTAAACATCCCTGCCTGTGGGTCTGAAGAGAGCAGCAGATCTCCC
AGGACAGCGTTCAAGCTCTGTTAAGGGTCAGACTGCCTCCTCAAGTGGGTCCCTAACCCCATTTGTAGCCTGACTGGGA
GACACCACCCAGCAAGGGTTGACAGACACCTCATAGAGGAGACCTCTCGCTGGCATCTGGCGGGTGACCTCAGGGACA
AAGCTTCCAGAGGAAGGAGCAGGCAGCAATTTTTGCTGTTCTGCAGCCTCCGCTGGTGATATAGGTAAACAGGGTCTGG
AGTGGGCTCCAGCAAACTCCAGCAGACCTGCAGAAGAGGGGCTGACTGTTAGAAGCAAACTAACAAACAGAAAGGA
ACAGCAATGACATCAACCAAAAGGATGTCCACACAAAACTCCATTGCAAGCTTACCAACATCAAAGACCCAGGTAGA
TAAATCCATGAAGATGAGAAAAAATCAATGCACAAAGGCTGAAAATTCAAAAACCAGAATGCCTCTTCTCCTCCAAA
GGAACAGAACTCTCAACAGCAAGGGAACAAAACCTGGATGGAGAATGAGTTTGACGAATTGATAGAAGTAGGCTTTAGA
AGGTGGGTAAATAACAACTCCTCTGAGCTAAAGGAGCATGTTCTAACCCATGCAAGGAAGCCAGGAACGTTGAAAAAA
GGTTAGATGAATTGCTAACTGGAATAACAGTTTAAAGAAGAACATAAATGACCTGATGGAGCTGAAAAACACAGCATG
GGAACCTTGTGAAGCATATGCAAGTATCAATAGCCAAATAGATCAAACCAAGGAAGGATATCAGAGATTGAAGATCAA
CTTACTGAAATAAAGCATGAAGACAAGATTAGAGAAAAAAGAAAGGAAGGAAACAAAGCCTCCAAGAAATATGAGACTA
TGCGAAAAAGAACAAACCTACATTTGACTGGTGTACCTAAAAAGTGATGGGGAGAAATGGAACCAAAAGTTGGAAAAACATC
TTCAGGATATTTATCCAAGAGAACTTCCACAACCTAGCAAGTCAGGCCAACATTCAAATTCAGGAATTCAGAGAACACC
ACAAAGATACTCCTTGAGAAGAGCAACCTAAGACACATAATCGTCACATTCACCAATGTTGAAATGAAGAAAAAATG
TTAAGGGCAACCAGAGAGAAAGGTTAGGTTACCCACAAAGGAAAGCCCATCAGACTAACAGTGGATCTCTCTGCAGAAA
CCCTACAAGACAGAAAGAGAGTGGGGGCCAATATTCAACTTCTTAAAGAAAAGAAATTTTCAACCCAGAAATTCATATCC
AGCCAAACTAAGCTTCAAAAGTGAAGAAGAAATAAATCCTTTACAGACAAGCAAATGCTGAGAGATTTTGTCAACCACC

359/375

AGGCTTGCCCTTACAAGAGCTCCTAAAGGAAGCACTAAACATGGAAAGGAAAAACCAGTACCAGCCACTGCAAAAACATA
CCAAATTGTAAAGACCATCAACACTATGAAGAACTGCATCAACAGGCCAAAATAACCAGCTAGCATCATAATGACAGAA
TCAAATTCACACATAACAATATTAACCTTACATGTAAATGGACTAAATGCCCAATTAAAAGAAACAGACTGGCAAATT
AGATAGAGTCAAGAAGCAACGGTGTGCTGTATTTCAGGAGACCGATCTCACGTGCAAAGACACATAGACTCAAAATAA
AGGATTGGAGGAATATTTACCAAGTAAATGGAAAGCAAAAAAGCAGGGGTTGCAATCCTAATATCTGATAAAACAGAC
TTTAAACCAACAAAGATCAAAAAAGACAAAGAAGGGCTTTACATAATGGTAAAGGGATTGATGCAACAAAAGAGCTAA
CTATGCTAACTCTCCTAAATATATATGCACCCAATACAGGACCACCCAGATTCAAAGGCAAGTTATTAGAGACCCACA
AAGAGACTTCAACTCCCATACAATAATAGTGGGAGACTTTAACGACCCACTGTCAATATTAGACAGATCAATGGGACAG
AAAATTAATAAGGATATTTCAGGACTTGAACCTCAGTTCTGGACCAAGCAGACCTAATAGACATCTACAGAACTCTCCACC
CCAAATTCATAGAATATACATTCTTCTCAGCACCACATCACACTTATYCTAAAATTGACCAACAGAATTGGAAGTAAAA
TACTCCTCAGCAAATGCAAAAGAATGGAAATCATAACAAACAGTATCTCAAACCACAGTGCATCAAATTAGAACTCAGG
ATTAAGAAACTGACCCAAAACCTGCACAACCTACATGGAAATTGAACAACCTACTCTGAATGACTACTGGGTAAATAATA
AAATTAAGGCAGAAAATAAGTTCTTTGAAACCAATGAGAACAAGGCACAACATACCAGAATCTCTGGTACATACCCAA
AATAGTGTTTAAAGGGAAATTTATAGCACTGAATGGCCACAAGAGAAAGCAGGAAAGATCTAAATCGACACCCTAACA
TCACATGAAAAGAACTAGAGAAGCGAGAGCAAAACACATTCAAAGCTAACAGAAGACAAGAAATAACTAAGATCAGAG
CAGAACTGAAGTAAACGGGAGACAGAAAAATCCTTCAAAAAAATAATCAATGAACCCACGAGCTGGTTTTTTGAAAA
GATCAACAAAATAGACCACTAGCCAGACTAATAAGAAGAAAAAGAGAAGAATCAAATAGACACAATAAAAAATGATA
AAGGGGATATCACCACCTGGTCCCACAGAAATATAAACTACCATCAGAGAATACTATAAACACCTCTCTGCAAAATAAAT
AGAAAATCTAAAAGAAATGGATAAATTCCTGGACACATACATACACCTCCCAAATCTAAATCAGGAAGAAGTTGAATC
CCTGAAGAGACCAATAACAAGTTCTGAAATTGAGACAGCAATTAATAGCCTACCAACCAGAAAAAGTCCAGGACCAAAC
AGATTCAACAGAAATTTACTTTGAGGTACAAAGAGCTGGTACCATTCTTCTGAAACTATTCCAAACAATAGAAAAAG
AGGGACTCCTACCTAACTCAATTTATGAGGCCAGCATCTTCTGTATACCACAACCTGGCAGAGACACACACACACAC
AAAAGAAATTTTCAGGCCAATATCCCTGGTGAACATTGATGCGAAAATCCTCAATAAAATACTGGCAACCAATCCAG
CAGCATCAAAAACCTTATCCACCATGATCAAGTAGGCTTCATCTCTGGGATGCAAGGCTAGTTCAACATATGCAAAAT
CAATAAACATAATCCATCATATAAACAGAACCAATGCAAAAACCGCATGATTATCTCAACAGATGCAGAAAAAGCCTT
CGATAAAATTCACACCCCTTCACGCTAAAAACTCTCAATAAACTAGGTATTGATGGAAGGTATCTCAAAATAATAAGA
GCTATTTATGACAAACCCACAGCCAATGTCACTGAATGGGCAAAAGCTGGAAGCTTTCCCTTTGAAAACAGAACAA
GACAAGGATACCCCTCTCTCTATTCTATTCAACACAGTATTGGAAGTTCTGGCCAGGGCAATCAGGCAAGAGAAAGA
AATAAGGGTATTTCAGATAGGAAGAGAGGAAGTCATATTGTCTCTGTTTGCAGATGACATGATTGTATATTAGAAAAC
TCATCATCTCAGCCCAAAATCTCCTTAAGCTGATAAGCAACTTCAGCAAAGTCTCAGGATACAAAATCAATGTGCAAAA
ATCACAACATCCCTATACACCAGTAACAGACAAACAGCCAAATCATGTGTGAACCTCTCATTATAATTGCTACGAAGA
GAATAAAATACCTAGGAATACAACCTTACAAGGGATGTGAAGGACCTCCTCAAGGAGAACTACAAACCACTGCTCAAGGA
AATAAGAGAGGACACAAATGGAAAAGCATTCCATRCTCATGGATAGGACGAATCAATATCATGAAAATGGCAAAATGGC
CATACTGCCCAAAGTTATTTATAGATTCAATGCTATCCCCATCAAGCTACCGTTGACTTTCTTTCACAGAATTAGAAAAA
ACTACTTTAACTTCATATGGAACCAAAAAAGAGTCTGTATAGCCAAGAAAAATCCTAAGCAAAAAAATTAAGCTGGA
GGCATCACATTACCTGACTTCAAACCTATACTACAAGGCTACAGTAACAAATATAGCATGATACTGGTACCAAAACAGAG
ATATAGACCAATGGAACAGAACAGAGGCCTCAGAAATCACACCACCCATCTACAACCATCTGATCTTTCACAAACCTGA
GAAAAACAAGCAATGGGGAAAGGATTCCCTATTTAATAAATGGTGTAGGAAAACCTGGCTAGTCATATGCAGAAAACCTG
AAAATGGACACCTTCTTATACCTTATGCAAAAATTAACCTCAGGATGGATTAAAGACTTAAATGTAAGACCTAAAACCA
TAAAAACTCTAGAAGAAAACCTAGGCAATACCATTTCAGGACATAGGCATGGGCAAAGATTTCATGACTAAAAACCAAA
AGCAATGGCAACAAAAGCCAAAATTTACAAATGGGATCTAATTAACCTAAAGAGCTTCTGCACGACAAAAGAACTATC
ATCAGAGTGAACAGGCAACCTACAGTGGGAGAAAAGTTTTCATCTATTTCACCTGACAAAAGGGCTACTATCCAGAATC
TACAAAGAAATTAACAAGTTTGAAGGTAAAAACAACCTCAATCAAAAAGTGGGTGAAGGATAAAAAACAGACACTTCT
CAAAGAAGACATTTATGGAGCCAACAACATATGAAAAAAGCTCTTCATCACTGGTCAATTAGAGAAATGCAAAATCAAA
ACCACAACGAGATACCATCTCATGCCAGTTAGAAATAATGATCATTAAAAAGTCAGGAAACAACAGATGCTGGAGAGGAT
GTGGAGAAAACAGGAACACTTTTACACTGTTGGTGGGAGTGTAAATTAGTTAAACCATTGTGCAAGACAGTGTGGCAATT
CCTCAAGGATCTAGAAACAAGAAATACCATTTGACCCAGCAATCCCATAACTGGGTATATACCCAAAGGATTATAAATCA
TTCAACTATAAAGACACATGCACACGTATGTTTATTGCAAGCACTGTTTACAATAGCAAAGACTTGAACCAACACAAAT
GCCCAACAGGATAGACTGGATAAAGAAAATGTGGCAGATATACACCATGGAATACTATGCAGCCATAAAAAGGATGAG
TTCATGTCTTTGAGGGACATGGATGAAGCTGGAACCATCATCTCAGCAAACACAAGAACAGAAAACCAACACTG
CATATTCTCACTCATATGTGGGAGTTGAACAATGAGAACACATGGACACAGGGAGGGGAACATCACACACTGGGGACTG
TCGAGGGGTGGGGGCTGTGGGAGGGATAGCATTAAGGAGAAATACCTAATATAGATGATGGGTTGATGTGTGTAGCAA
ACCACCATGGCATGTGTATACCTATGTAACAAACCTGCACGTTCTGCACATGTATCTCAGAACTTAAAGTATAATAAAA
ACTCAAACAGCTCTACATTGTTATTTATTTAAAACCTTCAATTTACTTGTCTAAGAAATTATCTTTTTTTTTTTCATTCTCTC
TTCATTCTCTCACCAGCAATGGCATTTGGGTTTTTTTTAAGGCCACTTTAAAAGACATTGAAAATAATACCTGTTTGT
TTCATTCTATTATCTTATTACATTCAATTTGTCCTTTGAATGTTCCCAAGTTTCTGGTATGACACTACGAATCTAAGTT
ATTCCAGACTTCTCTATTCTTTCATGTATTTAGAAATACATTTTTCAAATTCCTAGGCTGAGGTATTAATAACTTTGCCC
AAATTTACCTTTCAAATGTATTTACCATCCCTGTATTACTCAGTACAAAAATTTGATTTTTTGGAGACATATTTGTACA
TATTTATGGGATACATGTAGTATTTTGTATCATGCACAGAACATGTAATGATCAAGTCAGGCTATTTGGGCTATTTCATC
ACCTCCATTATTGATTATACCTATATGTTGAGAACATCTTAAGTCCTCTTTTATAGTAAGTTTGAAACATATAATACTA

360/375

TACTATAGTCACCCCTACTCTGTTATTGCATATTAGAAATTTTTCTCTCTGTGTGTTTGTACCCATTAACCAACCTCTAC
 TTCATTACCCCCCACCACCCACACACCCTTCCAATCCTCTGGTGTCTATCATTCTATTCTCTACTTCCATAAGATCCA
 CTTTTTTAGCTCTTACATATGAGTGAGAACATGTGATATCTTCTTTCTGTGACTGGCTTATGTCACTTAAGATAATGA
 CCCTTCAGTTCTATCCAAGTTGCTGTAAATGCCATCATGTTAGTCTTGTATGGCTGAATAGTATTCATTGTGTATA
 TATATATATTCTTTAACCAATTCATCCATGATGGATACTTACGTTGATTCTTATCTTTGCAATTGTGAATGGTGTGCA
 ATAAACATGGGCTGCAGGTATTCCTTTGATATATTAATTTCTTTCTTTGGATAAATACTAGTTAGATTACTGGACTG
 TATGGTAGCTGTTTTTAGTTTTTTGAGAAATCTCCATACTGTTTTCCAAATGGCTGTACTAGTTTACATTCCCACCAA
 CTCCCACCAACAAGAAATTCCTTTTCTGTCATCCTCACCAGCATCTATATTTCTGCTCTTCATCTTCTCCTTCTCCTTCT
 TTGACAGGGTCTTGCTCTGTTGCCCTGTTTCCCAGGCTGAAGAACAGTGGTGATTACAGGTGCAATCAGGATGCACTGC
 AGCCTTGAACTCCTAGCCTTAAGCAATACCTCGCCTCAGCCTCATGCGTAGCTGAGACTACAGGCATCAGACTTTTTGT
 CTTTTTAGTAATAGTCATTTTAACCTGGAGTATGATGCTATCTCATTGTGATTTTAATTTGCAGTTTCCCAGTATTACT
 GATGTTGAGCATTTTTTAATATGCCCATTTGTCTTTTTTTGAGAAATATCTATTTCATGTCCTTTGCCCATTTTTCTTCT
 TAGGCAGAGTCTCATCTGTGCTCAAACCTGGAGTGCAGTGGTGAAATCGTGGCTCACAGCAACTTCTGCCTCCTAGGC
 TCAAGCAATCTCTCGCCTCCCTCCTCAGTGGCTGGGATTACAGGCGCCACCACCATGCCAGCTAATTTTTGTATT
 TTAGTAGAGACGGGGTTTACCAGTGTGGCCAGGCTGGTCTCAAACCTTCTGGTTTCAAGTGATCCACCTGCCTCAGCCT
 CCCACAGTGTGGGATTACAGGTGTAAGCCACTGCACCTGGCCCTTTACCCACTTTTTAGTAGGATGATTTGTGGTCTT
 TTACTGTTGAGTTGTTTGAATTCCTTGTATATTCTGGATACTAGTCCCTTGTGGATAAATATCTTGTAAATATTTTCT
 CCCATTCAACAAGCTGTATCTTCAGTCTGTTGGTTTTCTGTGTAGAAGAATTTTAGTTTAAATATAGTCCCATTGTCT
 ATTTTTCTTTTTGGTGCTGTGATCTAGAGATCTTAGCTATAAAATCTTTGGTCAGACTGATGTCCTGAATTTGTTTTCC
 CTATGTTTTCTGTAGTAGTTTCATAATTTGGGTCTTATGTTTAAAGTCCTTAACTGATTTGAGTTGATTTTTGTACAGG
 GTGAGAGATGGGTCCAGTTTCATTCTCTGCATATGGATATCCAGTTTGTGGTAAATGTGGTATATGCTGGCATCAGTGTAGT
 TTCCTCAGTGTATATACTTGGCACCTTTATAGAAAATCAGTTGGTGGTAAATGTGGTATATGCTGGCATCAGTGTAGT
 GTGTCCAGGCGGGCTGATCTGGGGCTTCCAGTCAGCTTGTGAGGTGCTGGCAATGGCAGCTGTGGGCCAGGTGGATG
 GGCAGGTCCATAGGCCCTGGGCATCAGGCATGGTGTGGGTGATGGCAGTTGCAGTGGCAGGACAATCCTCTGGTACCCA
 AGTAGTCCCAACTGATTTTCAAGGTGGCTGCAGGCCATTTCCCAGGCCACAGGTGGTTCATGTCTGTGGGTGGGGGT
 GTATGCTGGCTGTGATGGTAGTGGCAGGTTGGGTGAACCCATCTCCAGGCCCTCAGGATGAGTGTCTCAGGCGCCAACAG
 GAATAGATGGGGCTGAGCAATCCCAGGCCCTGCATGGGCACTAGGGAGAAGGGAGACAGAGGTGAGCCTCAGGCCCC
 CCGATGGTATATATAGGCACTAGCTATGGTAGGCAGGGCATGGTGATTTCCAGGCCCTCAGTGAATGCTTGGATGGG
 AGGACCAGCAGCTACACCCTAGCCATGTTGCTGGGGTTGCTTTCATTGGCAGAAGCCTTAGGAGGGCCACTGGGAGCAC
 ACACTTTGGCCCCAGGTGGTAGTTGCTGGTGGGGTAGCCTGTTCTCAGGGTGCTTCTAAATGTACGGTACCCTGCTGAT
 GGGGATGGTGGGTAGCTTCCAGTGGCCCCACATTGGATATGGAGGCAGCAGCCAGCAGCAGGGTCTGCGTTAGGG
 GGAGGTCAATGGGGCTCAAGGAATCTGGAGTTGCAAGGTCTGTGGGGTCCCAGGGTAGGATGCAGTCTGCTGGGCTTTC
 AAAATGGTACCTTGTCTGGAGTGCCTTAAGAGTGGGGTAAAGAGGGAGGGTGGGTGGGGTGACCCAGTGTGAGCTCCCCAT
 ATGAAGCAATGCCATCATGGGGTCTCCAGCCAGTGCCCTATGTCTTAGCAATTCATTCTTTGCGCTCCTGGCATCTCA
 AATGTTTTGTAGATGCCTTCTTGTAGCAGCCAGTCTCGTCCCTTTTCTTGAAGTCAATGAGCATCAAATGTGTTCAAGGA
 TTCATGAATAAATCTGACAATAATTAGTATTTTTTATAGGAATTGGAACATGGTTTATTGCAGTATACCGCAGTGT
 GTCAGCTCTAGAACTTACGAAGAAGAGGAAGAGGAGAACAAGTTTGACTCCTGTGAACGTTTTTCTTTTTTCTCAGGG
 CTTGTGTGGGTCAAAGGACTCTCCAGTGGCTAGGATTGCAGGAGTCCATGGTAGGAAGGTGGGCCACTGGGGCTACTC
 ACCTACTCTTTCTCACATTAGGGAGCCCCCTCCAGACTCCCTGCTAATCCCAGCTGAGCAGGCTACTTCACTTTCTCTC
 TTGTTTTTCATGCTAGGTGTCACTTCCGTGTTGAATTCAGCCTTCTCTCTTAGGTGATCTATTTTTATTTTACAAGTT
 AGAAATATAAGTGCAGAGAAGTTAAACAGCAAACTCTGTGGCTTCCAAGAGTGGCAAAGCAGTTTCTAGCCTATGTTGG
 CTGAGTTTTGACCAAGCCTCTGATATGCATACATATATACATGTTTCATGTACGTGTACTTAAACATTTTTATTCCC
 ATGTTTAAAGGCTAGTTGAATAGGGGTGAACACAGAAAATCCTAGCAATTCATTCTTTGCACTCCTGGCATTCTCAAATG
 TTTGTAGATGCCTTCTGTAGCAGCCAGTCTCGTCCCTTTTCTTGAAGTCAATGAGCATCAAATGTGTTTCAAGATTCA
 TGAAATAAATCTGACAATAATTAGTATTTTTTATAGGAATTGGAACATGGTTTATTGCAGTATACCCAGTGTGTTGTCA
 GCTCTAGAACTTACGAAGAAGAGGAAGAGGAGAACAAGTTTGACTCCTGTGAACATTTTCTTTTTTCTATAATTTACG
 CATATGCTAACAAGCAGCTAGTTTCAAAACACAACTTACCTTGACAGGAAC TAGGTCTCACTGTTGAGAATGTAGTCT
 CCTCTCTCCCCACATAGCCCTAGGGTTATTCAAGGATGAAGGAGAAGAAAAACATACCCAGAGCATTTTTATAATTTCCA
 TCCTTCTCTTCTGTTATGCTAAGGTTACTAGTACCATGACCTATGTGAACCTCGTTTTTCTTGAATAAGAAGATAAAGC
 GTTCCGTCCATCAAGGAAGACCTCAAGAGAAATCCAGGTTTCAAGGTTCTCATGGTACAAGAGCCAAGTGTGTTCTTCTGA
 ATCATTTCCAGGCCTGCTTTTGTATCTGAGCAGTGGCTTTCAAAAAATATGCTGATGAGATTGCTCTCTCACTTAAGAAC
 TTAAGAAAGAGTTGAAGTTCTTCAATGTATATCCCCAGCCTGAACTTGTCTTGAGGAAGATTGTTAGTAGTAATGAAG
 GGTGACAGTAACCTAAGGGTGAAGAATGTAGAGAGATTTTTCCCAAGAGCAATCCAAGATACTGCTTGAACATCCGGG
 GTCCACTGACATGCCCCCTGGACTCCAGGAGAAATCTGGAAATGTCTGGACCTGCAATGAGACACACCCAGCTTTCAAAT
 GTGTCACTCTGGGCATATTCTTTAATCTGAGCTCCAATTTTCTTTCTTGTAAAGAGTCATTACACATGGCTGTTTTATTT
 ACTAATTCGTTTTTTTAAATTAAGAAATAAATTTGTAGGAGTAATATAGTTTACATTGTTTTACAAGTCAAATTCCTACAT
 GGCTCATTTCCATCCATTTTCAATGGATGTGTTTACCTTCTGGTATTTATTAGAAATTTGCTTTAGCAATTTCTGTTGCTCACC
 TCACAGTTCTTGTGTCTCTTAGTTTCTTTCTGTTTTTGGTCTTTTTATGCGAGAGGTTTTCTCTCACATTGTCTGATA
 ATCCTTGGCAGTCAGTTTCTGATTGAAGAGTTAGACATTAGAAAGCCAAGTGAATAATCCTGTGTGTGTACAAGGTTTGT
 GACTGGAAAGCTTCATGGGGATATTCTTGTGTTGACATTTCACTGAAGGACATCCAAAACCTGTTGCCGTTTTTAGAT

361/375

TTTTTTTCTTGGATTGTTGGTTTTCTTGGTGATCTTACTCCAATCTCTTTGGTGCCATAATTCTACCAGCTGAGTATGA
GAAGGAGCTGGGGTTTCTCAATGCAGAAATATGTACTTTGGTTCTAATATGGTAGTCTGGTTCTAATATTGTAGCCTTTTT
CTCAGCAATGGTTGCCACATCTGAGTCCTGAATCCCTTTGGAATCAGCCTCTCCAGAGGGTGTATGTTTAGAACCGGCG
TGAGTGAAAGGTAGTCATCCAATGACATGAGGTGGGTGAAAATATTTTAACCTGCTTTATTTATAAAATTTTCAACTGACC
CTCCTGTTTTTTGAAAACCCACCAGTGTCCTTCCATAAGTCCCTGGATCCTCAATTTTCCAAGTCTTCCCTGGAATTC
TATGGAGTAAATTAGCTTACTGATGCATTTCCCTTACTTGCCCTTAGGTTTTCTGCTCACTCTGTTCCCAAGTCAATTATG
ACCTACCTGGCTGCTTCCAGTTTCTGAAAATGTTGTGTGTGTCAGCTTCTTTTCCATTGCTTTGTCTTGAAGCTTATGC
CATTTTAAAAAATTCTTTTGTGTGCTGTTTTTGTGGAGAAATAGAAAAATATGTACATTCAATCCCCATGTTTAAAGTGGA
AGTCCCTCATAAAATTATATTAGAAAATTTATTAGAAAATATATACACACATATGAATATAGATAGATATACACTCTCTTT
TTTAGCATACATAGTGCCTGTTATTTAGCAGGTACTAAAAAATAATATGTATATGTATATACATGTAGCAGAAGGCTAA
CAGGAACCTTAGATACACTCAGGAATATATGATAGCATGGAAGGTTGGAACGGTGGGCCCTGTGCACAATCAAGTCATGAG
GACTTAGAAAAAGACGGAACCATGGCTGGGTGCGGAGGCTCATACCTGTAATCCAGCACTTTGGGAGGCGGAGGCCAG
TGGATTACCTGAGGTGAGGAGTTCAGGACCAGCTTGGCCAACATGGTAAACTCTGTCTCTTAAAAAATAAAAAAAAAA
AAAAAAAAAATACAAAAAATTAGCCAGGCATAGTGGCAGGCGCTGTAAATCCCATCTACTCGGGAGGCTGAGGCGGAGGT
TGCTGTGAGCCAAGATCGCGCCATTGTCAGTCCAGCCTGGGCAACAGAGCAAAACTCAGTCTAAAAAATAAAAAAAAAA
AAAAAGAAAGAAAGAAAGAGAAAAAGAAAAAGAGAACTGGCAGGATTGAGTAATTAAGCCAGAGTCAGAAGGAGAAG
TACTTCTCAATACAGCATGGTATCTTCTGTTTTTTAGACACGGCTCTACCCAGCTCAATTGATTTCATGACTGTGTGGGT
GTATTTTGTGTTTTGTTTTTCTTTTTTCAGACTTTGTCAACAGGAAGTAGGTGCCCATGTTGTTGATAGAAAAGTTTGTA
GTAGGACTGCACAGACTTGGTTTTGGTTTCAGCATTTGGCAATAATCAGTCTTTCTGCTTCAGCCTTCAGAGAGCCACT
TCATCATTCTTTCTGGCATCCCTGTGATCATATGATTACATATCTAATCAGTGTAACAACAACAGCTACTTAAAGAAGG
CATGCCATTAAAGATATTGTTAATATCTCTACATTGCCTTTCAAACATATGTAAGCATTCTAACTTGGAGTGAAATCTT
CTTAGGTGCTTTATATGTTGAAATTTCTACCAGTCAGCTGAGGAAGAAATGTATACGGCTTATCCCCAAAATAAGATATT
CCAACAAATAATGTTTATGAGAGCTGTTAATTTATGTTTAAAAAATAAGCTATTAATAAAATGTTTAAAGTAATTAAT
TGGGAGCTTGATTGGCAGTAGGAATATTAAGAGGATTAGCTAGATAAATAATGTAATAATGTAATGTTATTGAGT
CAACAAAAGCTTATATAGATTTAATTACTATGATGATATTAGATTACTTCATAATTAGAATCTTTGTAGAAATGTTTTG
GTATAATTGCATTCAATACTCAAAAAGTAAGCTTAAAGAATGATATTTTTAATTATTAAATTCAGTAAGTCATAAG
TCTTATTTTTTGCATTATATGAGGCTGAATTAAGAGCAGAAATGCCATCTGACATTTCAAAAATTCATGGAGAGAAATGT
ATCTGAAATCATATACACCAAAAAGATAAGTAAATTTGATAGAAAAAATGAATGTATTTAGCTGAGTTCTGACATG
CATTTTATTACAAATCAAACCTTCAGAACAAGACAATTTCTTATTTTGAATTTATAGAGACTATTCTAATATTAA
ATTGATTTTTTACAAGCTAGCAAATATTTTCAATAGTTGAAGCTTCGGAGTTTCTCATTATCTAAGCTATGTAATGCA
TGCAAAGTTTCTTCTAGAAAACAAATTACTGAAAGACATTTTCTGATTTGTATTTGGCTGTGTTATTTCCCAAGAGGT
GAAATTATTAAACATGCCATTGAAAGCCAGTAATCCTTAGTACAGGTTGAACATCCCTAATCTGAAAATCTGAAATC
TGAAATGCTCCAAAATCTGAAACTTTTTCAATGCCAACATGATGCCACAAGTAGAAAATTTTACACCTGATCTCATGTG
ATGGGTACCAATCAAACTTTGCTTCATGAACAAAATCTATTTTAAAAATATGTATAAAATTTATCTTCAGGCTATTTGTTA
GGAAATAAAATAAACTCTAAGTCCCTCCGACTGACCCAGCGGATTCTCTCTTGGCCAAGGGAACCCCAAGCAAAACCT
TGGAAGCTGAATTCATGGCTATGATGGGATGGGAGATTGGGCATATGCCTCATTATATCCCCACCTCGCTAACAGTCG
TTAGGTTTTCTTCTTAAACAGCTAAACAGAAACAGCCTTTCCAAAAGACTACTAGCTTATCTTCCAGATACGTAACA
TTCAGATGAGATTCAATTATGTTTACCTTATTTTATGTAAGATGTAGATTACCAGGCATAACTAAAGTTTTACAAGT
ATGTAATCAATTTGTCTCACTGCTGCCCCACCCTCCCTGCTTTTAAAGGAAAATATATAAAATACTAAACCTCCTAAG
AACCTCTTTGGAAAAACAGTCAACATGCTTCTGTGACTCTCTATTTTCCAGGTATGCCTTCAAGCTGGCTCAACAA
AGCTTGATGCTTTGAAACTTATGCTTCAATTACTCATTTCAGTTGTGTCAGTGTAAGGTTGTATGAAATAGAAAAGAA
TTCTGTGTTTAGACAGTTCTCATCAGTGAGATATCTCATTGTGTATATCCCAAAATATTTCAAAAAAATGAAATCCAAA
ACACTTCCAGTTCCAAGCATTTAGGACAAGGGATATTCAATCTGTATCAGAAACATGCGATGGTGACCACAAAAGGAAT
CTGGCAGCTGAAAATTCTGAGTCACTATCATGTCAAATATAAAATTTTATACAACTTAAAAAATAAACTGCCTACTAA
TCATTAATTTATATTATTGTTAAATTTATCATACAGTAAATTTGATTTTTTTCTTTTGTATGTACAGTTCTGAAACCA
CCTTTGCAAAAATTGCAACACTGAGAAAATTTGACAGTGAAAGAAATTTGACCTAACCAACTCCACATTGCCTTTAAC
CTCCAAACTGCCCTTCAATTCCTGGGCATGGCCTAAGCTAACTTTGGGAGAAATTTAGGTTATAGTTTAAATGATAATAG
CTCTTTCCAAAATAAAGTGCCTTTGTAAACTAATGAAAGGCCACCAGTTTACGAAGATAGGAGGCGCTGAATCTGCTG
TAAGATATAGGCATAGTTAAGTGATTACCAGCCATTATTCAGAGGTCACAAGATTTTCAACTTCTCAATTACTCCTG
TAAATAACGTTACTATTGTAGAACCTAAAATTACTATTGTAGAACCTAAAGTTGACCTTTTGTAGATGTCTTGTGAGGCT
TTTGCATTTCTGATGACMCCAGTGTCCTGAACCAAGTGACTCCTCTGTGGACCTTACTGGAAGCTGACTCAGGGCACAC
GAGGACCATTTTCCACACCCATATGATTGCATCCCCAACCAATCAGCAGCACCATTCTTTGGCCACCAAAATTAATCT
TGAAAACTCTAGCCTCCAAATTTTCCAGGAGGCTGATTTGGGTAATAATAAACTCTGGTCTCCTGTTTAGCTGGCTC
TATTTGTATTAACTCTTTCTCTACTGCAATTGCCCTATCTTGATAAATCAGCTTTATCTGAGCAGCAGGCAAGAAGAA
CCCATTAGACAGTTACAGTTCTGTAAATTTTAAACACAAACATTGTTTCATGTAACCACCAGTAGGATCACCATCTGGATC
AGTTTACCACCTTAAAAAGCTTCTCATAATACCCTACTCCATGACACTAGGAACAGCTACTAGTTCTCCATCCCAATT
GTTTCATCTTTTGAAGTTTATATAAATGGAATTTGTATAGTATAATCATCAATTTTAAAAATAAAATTTTCAAGTGTATT
CATATTCATAAGTGTACTCTATGATGCTGATTTTATCTTTAGCCTCAGCTTATGCCAAACTATGCCTTTCCATATAT
GGCCAAATGTGTATTCAATATACCTCTAACTGGGAGGATCAATTGAAAGTGTGTTTTTACTAACTCTATAACACAAA
GGAATTCAGGATACCATAGGGATCATTCAACTGATTATAACACAAAATGGGGAGAGCCAATTTCCCTGTCCCCAGAGA

362/375

CCCTCTGGGCAGCTCTAGCTCCCTGAGGGASSCAGCACAAACAGTGGTCCCTTTCTCAGGAGATACCTGGGACACCAGGCA
GTTCCCTCTTAGACCTTCTGGGAGAGGGGTTCCAGCAGACGCTGGATAGGAGCAATAGCACTGAGAAGGGGTAGCAGAA
GCAGCAGTGGCCTTGACTTGTGTATGTGCACATATGCAAGGAGCCCTTGCGAGACTCCCTTCTCCCCAGGTAGTAGGGT
CTTGCTTGCCTTGCTAGTGGCAAGAACCCTAAAGTTTAGTTGTTACTGTTAACGTAACCCCTATTTCTACTTACAATGT
GGTGAGGCCTTGGAACCAAGTTATATAAACATTTGTCTTAGTTCAATTTAGGCTGCTTTAACAAAAATACCATAAAC
TGGGTGGTTTTATAAACAAACGAACATTTATTTCTCACAGTCTCGGAGGCTGAGAAGTCCGAGATCATGCTGCCAGCAGAT
TCACTGTCTGGTGTGGTCCCATCCCTACACAGTGAAAGCAGCAAGGTCACTTTCTGTGCCTGATTTATAAGGACACTAA
TCCCCGATCATGAGGACTCAACCCTCATGACCTAATCACCTATCAAAAAGCCCCATCACCTTAGGGTTTAGGATTTCAAA
ATATGAATTTTGGGTAGACACAAACATTCAGACTGCAGCAACATTCATAGAGGCAACTCACCTACCAGGAGGCAACTT
TTCATTCCTGATGCCCAGGTATGACAGACCTCAAATCTGTTACCGTCCCATGAACCAGGAATATACAAAGGGTAGAGGG
GCATAGCTCTGGGTGAAGAGCTGCACTCTGTTCACTCTGGGCTCTGTGTGGTGGTGTCCCAGGTAGTGTCTAGTCCAGCT
GTTAAGTCCAGTGAGGCTCAGAAAGGTGATGTCAATTTGTTCAAAATCTTCAGCTAGTTTGTGTTGAGTCCAGATCATAACCAG
ACCCCTATGAAGTCTAATCATACCCAGTTCTGTAGGCTTTTCTCTTCAATAGGTCCATTCTTATCTCTAACTGAGACCAC
CTGCATCCTCATAGCTTAACATCAGTATGGAAAAACAAACCATCTGTGTCACTATGACTTTTACTATTTGTTCAAGAAAA
TCTTTGTCCAGGAAGATAAGACGGTGTACAATAAATAACATCAATGTTTACTTCAGAAAAATTTCTGAAAAACCAATTTAT
TCAGATGATAGATTGCTCATTGAAAAAATAAACCCCTTTTTCAGGACAACAGATTCTCTCCAAGTCTAATAACTTGT
TATCAAAGATCTATTTTTCAGGACTTCAAGACCCCTTATCACAATGTCCACCAATTCTAAACTATAATATCATGAAC
TTGCCGAATTTCCACCAGATTTCTTCTTGAAGGCTGACTTTTAAACCACTTGAGCTCAGACCCCTTAATGTTTATAAA
TATCTACCTGTGACCTCTCCCTTTTGAGAATTATAAGGACTTTTCAAGGTGTGCACTCTTCTAGCAGGTTAATAA
ACTTAGCTTTGTTTGATCAATAGTTTATTCTGATGGTCTTCTTTGAAAGTCAGCAATCAACAGTTCTGGGGCCCTAGTA
GGATTCACCTCAATAATTTCTGCTCCTGCAGTTTAAGAACCTTAGCCCTAAACAGTGTGTTCTTCTGAAGTTTGCCATTT
GGAAGCCTCCCCCACTGCAGTGTAAAGGTAAAGTCTCTCATTGGATTGAGTCCCGGTGTCTTTCCATAAAGCTCTTAA
ATTGTTTATTTTCTTCTTAGAAATAAGAACTTTTAAAGAAATCTCTGGATTATCTGATCAGATTGAAAAATGTTTATT
CTTTGTGGAATGTTTTATTACTAGTAACATTACTCTTTTGTCTTTTATCCTATTTGTTGTGAGTCTATGAGAAGAAG
CTCACAGGGAAGAAGACAGCCGTAGACCTGGCAATTTTGTCTCAAACCTGGCTCAAAGATAACAATAATATCAGCGGGTC
TCATCAAACCTGGCATTCTTATAGAATAAACTTTGCTCTGGGTCACTTACTAATATCTTACAGAAAAATTTATAGCAGCAG
TTGTATATTGAGGGTGTGAATAAAAACCACCAGAGAAGCTTTTGA AAAAATACTATGAATAGATTTCTGCTTCTGGCC
AAAAATGAAGAAACAGGGACCAGATTTACTCTCCAGTAAACCAGTGGAAAAAAAACAGACACAATATTGAAAAATAAAA
AGATTTTTCAGACATCAGGCAATGAAGAATAGTGATCCAAGAGAAACAAGAAACAAGATGAATCTTATGTTTCGCCACA
GCTTACTGTCTGGAGTGAGTATCAAGACTGTGGTACAGAAAGGGAAAAACCCAGATGGAACCTGCCATCTCCCTAAGTG
GAGTCTGGGGAGGGCAAAGTGAGTAGAGTTTGCAAGGAAAGATATGGGAAAGGAGACAGCTGTGCAGAGAGAACTGG
GGATCTGTACAGGGTCTTCAGCTGAGCATGAGTCAGCATATGCATGTGAGGAAACTACCCATGACTGGGGAAAGAATCA
GCTGGAATGATTACGGGGTATAGAATCCAGGGCTCAGAATCATTCTGTTTCTATAGGAAATGGGCATTGAGTAGCATA
CTTGGAAGAATTTTGTCTCAGTCATGCAGTAACATAGAACCTTAGACTAAATACTACTCTGATACCACATAATGAACT
CAAAATAAGACCCAAAAGAATCAAACGTGTTTATAAGTAACTGAGTTTCAAAATAAAGTTCAAGAATATTTATAGAAATA
CCATCTAACAAGCACAAAATTAAGATAAAGGGTCAAACATTTTGCAAGTAATTTTAAAGTGTGTTCTAGAACAAAGTTC
AAAAGTATTTATAGAAAATACAAAAGGATCCAAAACTGTCCAAAAAATATGACCCATAATGAAGAGAAAAATCAGTCA
TTTGAAACTAACCCAGAAAATGACAAAAGATGATAGAATCGGCAAGACATTAGAAGAACGTGAATTTGTACTTTCGCATGTT
CAAGAAGCCAGAGGAAAAGACTGAACATGGTAAGCAGAAACATGGAAGATATAAAAAGACTAAAAATCAAACCTTTAGAGA
TGAAAAACATTATGTGAGATGAAAAACACACTGAGTAGAATTAAGGCAAATTTGGAATTTTCAGAAGACTAGTGACTTTA
AGAATTGAGAGATAAAAAGTACACAAAATGAGAAACAGAAGTGTGTGAGTGTATGGGACAACCTCAAACCTAATGCG
TAAATTGCAGTCCCTGAAGGAAATGAGGGATATGTTGGAAAAAATATTTGAAAAAATAATGGCCAAAAATCTCCCAA
GTTTATGAAAACACAGATTCAAGAAGGTCAACAAATGCTTAAAAATAGAGAAAGTCTAATATTAGGATACAAGGTCT
TGACCAGGTGTGGTGGTTCATGCCTGTAATCCCAGCACTTTGGAAGGCCGAGTGGGAGGTGAATCACTTGAGGTGAGGA
GTTCAAGACCAGCCTGGCCAACATGGTGAAAGCCTGTCTCTACTAAAAACACAAAAATTAGCCCGGCGTGGTGGTGCAC
ACTATAATCCCAGCTACTCGGGAGGCTGAGACAGGAGAATCACTTGAACACAGGAGGTGCAGGTTGCAGTGAGCCGAGA
TTTGTGCATTGCACTCCAGCCCTGGGTGACAAAAGTGAGACTCCGTCTTAAAAAGACAAAAACAAAAACAAAA
AAATGGAAATAAGGTCTCAAATTAATAACTTCAGCTTACACCTTAAAAAAATTAGAAATATCATT

363/375

Position of N ambiguity code		
30102 R	150961 Y	290063 R
30205 Y	152214 R	290164 Y
30559 Y	154374 Y	290801 R
30699 K	157074 M	292925 R
34304 R	157272 R	293201 R
34516 K	160863 Y	293611 Y
34782 R	161195 R	295755 R
35697 K	162720 Y	296143 R
35810 Y	163290 R	296739 Y
36817 Y	165441 K	297107 W
40290 K	166462 R	297460 Y
40454 M	168136 Y	297895 R
49148 S	173481 R	298027 Y
55023 Y	173519 R	298152 N
58397 Y	175259 S	298153 N
58622 R	175603 Y	298585 S
58633 S	181225 Y	298605 K
74447 R	197941 M	298799 R
75896 K	198444 Y	299792 M
82244 S	198745 R	300815 Y
88456 W	221134 R	305880 R
88499 R	222532 K	306978 M
90688 S	224195 R	309436 Y
99035 R	224801 Y	309763 Y
102977 R	226923 R	313529 K
104552 Y	227254 Y	313971 R
104862 R	227460 S	317210 S
105225 Y	228326 K	318829 Y
111252 Y	228647 Y	410826 R
111781 Y	228831 R	
112118 M	230175 K	
118914 W	230288 Y	
120628 R	232201 M	
123312 R	232338 M	
123426 S	234332 R	
125304 M	235271 R	
128015 Y	263539 K	
128393 R	270257 R	
129360 Y	270458 Y	
129361 Y	270498 R	
131865 M	271159 Y	
132562 R	274150 Y	
135112 K	274353 M	
138281 Y	275602 Y	
138806 R	277422 M	
147700 Y	278146 R	
147715 R	286615 Y	
148161 Y	289348 S	
148236 Y	289425 R	
148606 K	289868 R	
	289979 Y	

364/375

<210> 2
 <211> 809
 <212> PRT
 <213> Homo Sapien

<400> 2
 Met Glu Ala Glu Gly Ser Ser Ala Pro Ala Arg Ala Gly Ser Gly Glu
 1 5 10 15
 Gly Ser Asp Ser Ala Gly Gly Ala Thr Leu Lys Ala Pro Lys His Leu
 20 25 30
 Trp Arg His Glu Gln His His Gln Tyr Pro Leu Arg Gln Pro Gln Phe
 35 40 45
 Arg Leu Leu His Pro His His His Leu Pro Pro Pro Pro Pro Pro Ser
 50 55 60
 Pro Gln Pro Gln Pro Gln Cys Pro Leu Gln Pro Pro Pro Pro Pro
 65 70 75 80
 Leu Pro Pro Pro Pro Pro Pro Gly Ala Ala Arg Gly Arg Tyr Ala
 85 90 95
 Ser Ser Gly Ala Thr Gly Arg Val Arg His Arg Gly Tyr Ser Asp Thr
 100 105 110
 Glu Arg Tyr Leu Tyr Cys Arg Ala Met Asp Arg Thr Ser Tyr Ala Val
 115 120 125
 Glu Thr Gly His Arg Pro Gly Leu Lys Lys Ser Arg Met Ser Trp Pro
 130 135 140
 Ser Ser Phe Gln Gly Leu Arg Arg Phe Asp Val Asp Asn Gly Thr Ser
 145 150 155 160
 Ala Gly Arg Ser Pro Leu Asp Pro Met Thr Ser Pro Gly Ser Gly Leu
 165 170 175
 Ile Leu Gln Ala Asn Phe Val His Ser Gln Arg Arg Glu Ser Phe Leu
 180 185 190
 Tyr Arg Ser Asp Ser Asp Tyr Asp Leu Ser Pro Lys Ser Met Ser Arg
 195 200 205
 Asn Ser Ser Ile Ala Ser Asp Ile His Gly Asp Asp Leu Ile Val Thr
 210 215 220
 Pro Phe Ala Gln Val Leu Ala Ser Leu Arg Thr Val Arg Asn Asn Phe
 225 230 235 240
 Ala Ala Leu Thr Asn Leu Gln Asp Arg Ala Pro Ser Lys Arg Ser Pro
 245 250 255
 Met Cys Asn Gln Pro Ser Ile Asn Lys Ala Thr Ile Thr Glu Glu Ala
 260 265 270
 Tyr Gln Lys Leu Ala Ser Glu Thr Leu Glu Glu Leu Asp Trp Cys Leu
 275 280 285
 Asp Gln Leu Glu Thr Leu Gln Thr Arg His Ser Val Ser Glu Met Ala
 290 295 300
 Ser Asn Lys Phe Lys Arg Met Leu Asn Arg Glu Leu Thr His Leu Ser
 305 310 315 320
 Glu Met Ser Arg Ser Gly Asn Gln Val Ser Glu Phe Ile Ser Asn Thr
 325 330 335
 Phe Leu Asp Lys Gln His Glu Val Glu Ile Pro Ser Pro Thr Gln Lys
 340 345 350
 Glu Lys Glu Lys Lys Lys Arg Pro Met Ser Gln Ile Ser Gly Val Lys
 355 360 365
 Lys Leu Met His Ser Ser Ser Leu Thr Asn Ser Ser Ile Pro Arg Phe
 370 375 380
 Gly Val Lys Thr Glu Gln Glu Asp Val Leu Ala Lys Glu Leu Glu Asp
 385 390 395 400
 Val Asn Lys Trp Gly Leu His Val Phe Arg Ile Ala Glu Leu Ser Gly
 405 410 415
 Asn Arg Pro Leu Thr Val Ile Met His Thr Ile Phe Gln Glu Arg Asp
 420 425 430
 Leu Leu Lys Thr Phe Lys Ile Pro Val Asp Thr Leu Ile Thr Tyr Leu
 435 440 445
 Met Thr Leu Glu Asp His Tyr His Ala Asp Val Ala Tyr His Asn Asn
 450 455 460

Fig. 7.1

365/375

Ile	His	Ala	Ala	Asp	Val	Val	Gln	Ser	Thr	His	Val	Leu	Leu	Ser	Thr
465					470					475					480
Pro	Ala	Leu	Glu	Ala	Val	Phe	Thr	Asp	Leu	Glu	Ile	Leu	Ala	Ala	Ile
				485					490						495
Phe	Ala	Ser	Ala	Ile	His	Asp	Val	Asp	His	Pro	Gly	Val	Ser	Asn	Gln
			500					505					510		
Phe	Leu	Ile	Asn	Thr	Asn	Ser	Glu	Leu	Ala	Leu	Met	Tyr	Asn	Asp	Ser
		515					520					525			
Ser	Val	Leu	Glu	Asn	His	His	Leu	Ala	Val	Gly	Phe	Lys	Leu	Leu	Gln
	530					535					540				
Glu	Glu	Asn	Cys	Asp	Ile	Phe	Gln	Asn	Leu	Thr	Lys	Lys	Gln	Arg	Gln
545					550					555					560
Ser	Leu	Arg	Lys	Met	Val	Ile	Asp	Ile	Val	Leu	Ala	Thr	Asp	Met	Ser
			565						570					575	
Lys	His	Met	Asn	Leu	Leu	Ala	Asp	Leu	Lys	Thr	Met	Val	Glu	Thr	Lys
		580						585					590		
Lys	Val	Thr	Ser	Ser	Gly	Val	Leu	Leu	Asp	Asn	Tyr	Ser	Asp	Arg	
	595						600				605				
Ile	Gln	Val	Leu	Gln	Asn	Met	Val	His	Cys	Ala	Asp	Leu	Ser	Asn	Pro
	610					615					620				
Thr	Lys	Pro	Leu	Gln	Leu	Tyr	Arg	Gln	Trp	Thr	Asp	Arg	Ile	Met	Glu
625					630					635					640
Glu	Phe	Phe	Arg	Gln	Gly	Asp	Arg	Glu	Arg	Glu	Arg	Gly	Met	Glu	Ile
			645						650					655	
Ser	Pro	Met	Cys	Asp	Lys	His	Asn	Ala	Ser	Val	Glu	Lys	Ser	Gln	Val
			660					665					670		
Gly	Phe	Ile	Asp	Tyr	Ile	Val	His	Pro	Leu	Trp	Glu	Thr	Trp	Ala	Asp
	675					680					685				
Leu	Val	His	Pro	Asp	Ala	Gln	Asp	Ile	Leu	Asp	Thr	Leu	Glu	Asp	Asn
	690					695					700				
Arg	Glu	Trp	Tyr	Gln	Ser	Thr	Ile	Pro	Gln	Ser	Pro	Ser	Pro	Ala	Pro
705					710					715					720
Asp	Asp	Pro	Glu	Glu	Gly	Arg	Gln	Gly	Gln	Thr	Glu	Lys	Phe	Gln	Phe
				725					730					735	
Glu	Leu	Thr	Leu	Glu	Glu	Asp	Gly	Glu	Ser	Asp	Thr	Glu	Lys	Asp	Ser
			740					745					750		
Gly	Ser	Gln	Val	Glu	Glu	Asp	Thr	Ser	Cys	Ser	Asp	Ser	Lys	Thr	Leu
	755						760				765				
Cys	Thr	Gln	Asp	Ser	Glu	Ser	Thr	Glu	Ile	Pro	Leu	Asp	Glu	Gln	Val
	770					775					780				
Glu	Glu	Glu	Ala	Val	Gly	Glu	Glu	Glu	Glu	Ser	Gln	Pro	Glu	Ala	Cys
785					790					795					800
Val	Ile	Asp	Asp	Arg	Ser	Pro	Asp	Thr							
				805											

<210> 3

<211> 150

<212> PRT

<213> Homo Sapien

<400> 3

Met	Asp	Arg	Thr	Ser	Tyr	Ala	Val	Glu	Thr	Gly	His	Arg	Pro	Gly	Leu
1				5					10					15	
Lys	Lys	Ser	Arg	Met	Ser	Trp	Pro	Ser	Ser	Phe	Gln	Gly	Leu	Arg	Arg
		20						25					30		
Phe	Asp	Val	Asp	Asn	Gly	Thr	Ser	Ala	Gly	Arg	Ser	Pro	Leu	Asp	Pro
		35					40					45			
Met	Thr	Ser	Pro	Gly	Ser	Gly	Leu	Ile	Leu	Gln	Ala	Asn	Phe	Val	His
	50					55					60				
Ser	Gln	Arg	Arg	Glu	Ser	Phe	Leu	Tyr	Arg	Ser	Asp	Ser	Asp	Tyr	Asp
65					70					75					80
Leu	Ser	Pro	Lys	Ser	Met	Ser	Arg	Asn	Ser	Ser	Ile	Ala	Ser	Asp	Ile
				85					90					95	

Fig. 7.2

366/375

His	Gly	Asp	Asp	Leu	Ile	Val	Thr	Pro	Phe	Ala	Gln	Val	Leu	Ala	Ser
			100					105					110		
Leu	Arg	Thr	Val	Arg	Asn	Asn	Phe	Ala	Ala	Leu	Thr	Asn	Leu	Gln	Asp
		115					120					125			
Arg	Ala	Pro	Ser	Lys	Arg	Ser	Pro	Met	Cys	Asn	Gln	Pro	Ser	Ile	Asn
		130				135					140				
Lys	Ala	Thr	Ile	Thr	Val										
145					150										

<210> 4

<211> 745

<212> PRT

<213> Homo Sapien

<400> 4

Met	Ala	Gln	Gln	Thr	Ser	Pro	Asp	Thr	Leu	Thr	Val	Pro	Glu	Val	Asp
1				5					10					15	
Asn	Pro	His	Cys	Pro	Asn	Pro	Trp	Leu	Asn	Glu	Asp	Leu	Val	Lys	Ser
			20					25				30			
Leu	Arg	Glu	Asn	Leu	Leu	Gln	His	Glu	Lys	Ser	Lys	Thr	Ala	Arg	Lys
		35				40						45			
Ser	Val	Ser	Pro	Lys	Leu	Ser	Pro	Val	Ile	Ser	Pro	Arg	Asn	Ser	Pro
	50					55					60				
Arg	Leu	Leu	Arg	Arg	Met	Leu	Leu	Ser	Ser	Asn	Ile	Pro	Lys	Gln	Arg
65					70					75					80
Arg	Phe	Thr	Val	Ala	His	Thr	Cys	Phe	Asp	Val	Asp	Asn	Gly	Thr	Ser
				85				90						95	
Ala	Gly	Arg	Ser	Pro	Leu	Asp	Pro	Met	Thr	Ser	Pro	Gly	Ser	Gly	Leu
			100					105					110		
Ile	Leu	Gln	Ala	Asn	Phe	Val	His	Ser	Gln	Arg	Arg	Glu	Ser	Phe	Leu
		115					120					125			
Tyr	Arg	Ser	Asp	Ser	Asp	Tyr	Asp	Leu	Ser	Pro	Lys	Ser	Met	Ser	Arg
	130				135						140				
Asn	Ser	Ser	Ile	Ala	Ser	Asp	Ile	His	Gly	Asp	Asp	Leu	Ile	Val	Thr
145					150					155					160
Pro	Phe	Ala	Gln	Val	Leu	Ala	Ser	Leu	Arg	Thr	Val	Arg	Asn	Asn	Phe
				165					170					175	
Ala	Ala	Leu	Thr	Asn	Leu	Gln	Asp	Arg	Ala	Pro	Ser	Lys	Arg	Ser	Pro
			180					185					190		
Met	Cys	Asn	Gln	Pro	Ser	Ile	Asn	Lys	Ala	Thr	Ile	Thr	Glu	Glu	Ala
		195					200						205		
Tyr	Gln	Lys	Leu	Ala	Ser	Glu	Thr	Leu	Glu	Glu	Leu	Asp	Trp	Cys	Leu
	210					215					220				
Asp	Gln	Leu	Glu	Thr	Leu	Gln	Thr	Arg	His	Ser	Val	Ser	Glu	Met	Ala
225					230					235					240
Ser	Asn	Lys	Phe	Lys	Arg	Met	Leu	Asn	Arg	Glu	Leu	Thr	His	Leu	Ser
				245					250					255	
Glu	Met	Ser	Arg	Ser	Gly	Asn	Gln	Val	Ser	Glu	Phe	Ile	Ser	Asn	Thr
			260					265					270		
Phe	Leu	Asp	Lys	Gln	His	Glu	Val	Glu	Ile	Pro	Ser	Pro	Thr	Gln	Lys
		275					280						285		
Glu	Lys	Glu	Lys	Lys	Lys	Arg	Pro	Met	Ser	Gln	Ile	Ser	Gly	Val	Lys
	290					295					300				
Lys	Leu	Met	His	Ser	Ser	Ser	Leu	Thr	Asn	Ser	Ser	Ile	Pro	Arg	Phe
305					310					315					320
Gly	Val	Lys	Thr	Glu	Gln	Glu	Asp	Val	Leu	Ala	Lys	Glu	Leu	Glu	Asp
				325					330					335	
Val	Asn	Lys	Trp	Gly	Leu	His	Val	Phe	Arg	Ile	Ala	Glu	Leu	Ser	Gly
			340					345					350		
Asn	Arg	Pro	Leu	Thr	Val	Ile	Met	His	Thr	Ile	Phe	Gln	Glu	Arg	Asp
		355					360					365			
Leu	Leu	Lys	Thr	Phe	Lys	Ile	Pro	Val	Asp	Thr	Leu	Ile	Thr	Tyr	Leu
		370					375					380			

Fig. 7.3

367/375

```

Met Thr Leu Glu Asp His Tyr His Ala Asp Val Ala Tyr His Asn Asn
385          390          395          400
Ile His Ala Ala Asp Val Val Gln Ser Thr His Val Leu Leu Ser Thr
          405          410          415
Pro Ala Leu Glu Ala Val Phe Thr Asp Leu Glu Ile Leu Ala Ala Ile
          420          425          430
Phe Ala Ser Ala Ile His Asp Val Asp His Pro Gly Val Ser Asn Gln
          435          440          445
Phe Leu Ile Asn Thr Asn Ser Glu Leu Ala Leu Met Tyr Asn Asp Ser
          450          455          460
Ser Val Leu Glu Asn His His Leu Ala Val Gly Phe Lys Leu Leu Gln
465          470          475          480
Glu Glu Asn Cys Asp Ile Phe Gln Asn Leu Thr Lys Lys Gln Arg Gln
          485          490          495
Ser Leu Arg Lys Met Val Ile Asp Ile Val Leu Ala Thr Asp Met Ser
          500          505          510
Lys His Met Asn Leu Leu Ala Asp Leu Lys Thr Met Val Glu Thr Lys
          515          520          525
Lys Val Thr Ser Ser Gly Val Leu Leu Leu Asp Asn Tyr Ser Asp Arg
530          535          540
Ile Gln Val Leu Gln Asn Met Val His Cys Ala Asp Leu Ser Asn Pro
545          550          555          560
Thr Lys Pro Leu Gln Leu Tyr Arg Gln Trp Thr Asp Arg Ile Met Glu
          565          570          575
Glu Phe Phe Arg Gln Gly Asp Arg Glu Arg Glu Arg Gly Met Glu Ile
          580          585          590
Ser Pro Met Cys Asp Lys His Asn Ala Ser Val Glu Lys Ser Gln Val
          595          600          605
Gly Phe Ile Asp Tyr Ile Val His Pro Leu Trp Glu Thr Trp Ala Asp
          610          615          620
Leu Val His Pro Asp Ala Gln Asp Ile Leu Asp Thr Leu Glu Asp Asn
625          630          635          640
Arg Glu Trp Tyr Gln Ser Thr Ile Pro Gln Ser Pro Ser Pro Ala Pro
          645          650          655
Asp Asp Pro Glu Glu Gly Arg Gln Gly Gln Thr Glu Lys Phe Gln Phe
          660          665          670
Glu Leu Thr Leu Glu Glu Asp Gly Glu Ser Asp Thr Glu Lys Asp Ser
          675          680          685
Gly Ser Gln Val Glu Glu Asp Thr Ser Cys Ser Asp Ser Lys Thr Leu
          690          695          700
Cys Thr Gln Asp Ser Glu Ser Thr Glu Ile Pro Leu Asp Glu Gln Val
705          710          715          720
Glu Glu Glu Ala Val Gly Glu Glu Glu Ser Gln Pro Glu Ala Cys
          725          730          735
Val Ile Asp Asp Arg Ser Pro Asp Thr
          740          745

```

<210> 5

<211> 215

<212> PRT

<213> Homo Sapien

<400> 5

```

Met Ala Gln Gln Thr Ser Pro Asp Thr Leu Thr Val Pro Glu Val Asp
1          5          10          15
Asn Pro His Cys Pro Asn Pro Trp Leu Asn Glu Asp Leu Val Lys Ser
          20          25          30
Leu Arg Glu Asn Leu Leu Gln His Glu Lys Ser Lys Thr Ala Arg Lys
          35          40          45
Ser Val Ser Pro Lys Leu Ser Pro Val Ile Ser Pro Arg Asn Ser Pro
          50          55          60
Arg Leu Leu Arg Arg Met Leu Leu Ser Ser Asn Ile Pro Lys Gln Arg
65          70          75          80

```

Fig. 7.4

368/375

```

Arg Phe Thr Val Ala His Thr Cys Phe Asp Val Asp Asn Gly Thr Ser
      85                      90                      95
Ala Gly Arg Ser Pro Leu Asp Pro Met Thr Ser Pro Gly Ser Gly Leu
      100                      105                      110
Ile Leu Gln Ala Asn Phe Val His Ser Gln Arg Arg Glu Ser Phe Leu
      115                      120                      125
Tyr Arg Ser Asp Ser Asp Tyr Asp Leu Ser Pro Lys Ser Met Ser Arg
      130                      135                      140
Asn Ser Ser Ile Ala Ser Asp Ile His Gly Asp Asp Leu Ile Val Thr
      145                      150                      155                      160
Pro Phe Ala Gln Val Leu Ala Ser Leu Arg Thr Val Arg Asn Asn Phe
      165                      170                      175
Ala Ala Leu Thr Asn Leu Gln Asp Arg Ala Pro Ser Lys Arg Ser Pro
      180                      185                      190
Met Cys Asn Gln Pro Ser Ile Asn Lys Ala Thr Ile Thr Gly Leu Tyr
      195                      200                      205
Asn Gly Ile Ile Ala Phe Leu
      210                      215

```

<210> 6
 <211> 673
 <212> PRT
 <213> Homo Sapien

```

<400> 6
Met Met His Val Asn Asn Phe Pro Phe Arg Arg His Ser Trp Ile Cys
  1      5                      10                      15
Phe Asp Val Asp Asn Gly Thr Ser Ala Gly Arg Ser Pro Leu Asp Pro
      20                      25                      30
Met Thr Ser Pro Gly Ser Gly Leu Ile Leu Gln Ala Asn Phe Val His
      35                      40                      45
Ser Gln Arg Arg Glu Ser Phe Leu Tyr Arg Ser Asp Ser Asp Tyr Asp
      50                      55                      60
Leu Ser Pro Lys Ser Met Ser Arg Asn Ser Ser Ile Ala Ser Asp Ile
      65                      70                      75                      80
His Gly Asp Asp Leu Ile Val Thr Pro Phe Ala Gln Val Leu Ala Ser
      85                      90                      95
Leu Arg Thr Val Arg Asn Asn Phe Ala Ala Leu Thr Asn Leu Gln Asp
      100                      105                      110
Arg Ala Pro Ser Lys Arg Ser Pro Met Cys Asn Gln Pro Ser Ile Asn
      115                      120                      125
Lys Ala Thr Ile Thr Glu Glu Ala Tyr Gln Lys Leu Ala Ser Glu Thr
      130                      135                      140
Leu Glu Glu Leu Asp Trp Cys Leu Asp Gln Leu Glu Thr Leu Gln Thr
      145                      150                      155                      160
Arg His Ser Val Ser Glu Met Ala Ser Asn Lys Phe Lys Arg Met Leu
      165                      170                      175

Asn Arg Glu Leu Thr His Leu Ser Glu Met Ser Arg Ser Gly Asn Gln
      180                      185                      190
Val Ser Glu Phe Ile Ser Asn Thr Phe Leu Asp Lys Gln His Glu Val
      195                      200                      205
Glu Ile Pro Ser Pro Thr Gln Lys Glu Lys Glu Lys Lys Lys Arg Pro
      210                      215                      220
Met Ser Gln Ile Ser Gly Val Lys Lys Leu Met His Ser Ser Ser Leu
      225                      230                      235                      240
Thr Asn Ser Ser Ile Pro Arg Phe Gly Val Lys Thr Glu Gln Glu Asp
      245                      250                      255
Val Leu Ala Lys Glu Leu Glu Asp Val Asn Lys Trp Gly Leu His Val
      260                      265                      270
Phe Arg Ile Ala Glu Leu Ser Gly Asn Arg Pro Leu Thr Val Ile Met
      275                      280                      285
His Thr Ile Phe Gln Glu Arg Asp Leu Leu Lys Thr Phe Lys Ile Pro
      290                      295                      300

```

Fig. 7.5

369/375

Val	Asp	Thr	Leu	Ile	Thr	Tyr	Leu	Met	Thr	Leu	Glu	Asp	His	Tyr	His
305					310					315					320
Ala	Asp	Val	Ala	Tyr	His	Asn	Asn	Ile	His	Ala	Ala	Asp	Val	Val	Gln
				325					330					335	
Ser	Thr	His	Val	Leu	Leu	Ser	Thr	Pro	Ala	Leu	Glu	Ala	Val	Phe	Thr
			340					345					350		
Asp	Leu	Glu	Ile	Leu	Ala	Ala	Ile	Phe	Ala	Ser	Ala	Ile	His	Asp	Val
		355					360					365			
Asp	His	Pro	Gly	Val	Ser	Asn	Gln	Phe	Leu	Ile	Asn	Thr	Asn	Ser	Glu
	370					375					380				
Leu	Ala	Leu	Met	Tyr	Asn	Asp	Ser	Ser	Val	Leu	Glu	Asn	His	His	Leu
385					390					395					400
Ala	Val	Gly	Phe	Lys	Leu	Leu	Gln	Glu	Glu	Asn	Cys	Asp	Ile	Phe	Gln
				405					410					415	
Asn	Leu	Thr	Lys	Lys	Gln	Arg	Gln	Ser	Leu	Arg	Lys	Met	Val	Ile	Asp
			420					425					430		
Ile	Val	Leu	Ala	Thr	Asp	Met	Ser	Lys	His	Met	Asn	Leu	Leu	Ala	Asp
		435					440					445			
Leu	Lys	Thr	Met	Val	Glu	Thr	Lys	Lys	Val	Thr	Ser	Ser	Gly	Val	Leu
	450					455					460				
Leu	Leu	Asp	Asn	Tyr	Ser	Asp	Arg	Ile	Gln	Val	Leu	Gln	Asn	Met	Val
465					470					475					480
His	Cys	Ala	Asp	Leu	Ser	Asn	Pro	Thr	Lys	Pro	Leu	Gln	Leu	Tyr	Arg
				485					490					495	
Gln	Trp	Thr	Asp	Arg	Ile	Met	Glu	Glu	Phe	Phe	Arg	Gln	Gly	Asp	Arg
			500					505					510		
Glu	Arg	Glu	Arg	Gly	Met	Glu	Ile	Ser	Pro	Met	Cys	Asp	Lys	His	Asn
	515						520					525			
Ala	Ser	Val	Glu	Lys	Ser	Gln	Val	Gly	Phe	Ile	Asp	Tyr	Ile	Val	His
	530					535					540				
Pro	Leu	Trp	Glu	Thr	Trp	Ala	Asp	Leu	Val	His	Pro	Asp	Ala	Gln	Asp
545					550					555					560
Ile	Leu	Asp	Thr	Leu	Glu	Asp	Asn	Arg	Glu	Trp	Tyr	Gln	Ser	Thr	Ile
				565					570					575	
Pro	Gln	Ser	Pro	Ser	Pro	Ala	Pro	Asp	Asp	Pro	Glu	Glu	Gly	Arg	Gln
			580					585					590		
Gly	Gln	Thr	Glu	Lys	Phe	Gln	Phe	Glu	Leu	Thr	Leu	Glu	Glu	Asp	Gly
		595					600					605			
Glu	Ser	Asp	Thr	Glu	Lys	Asp	Ser	Gly	Ser	Gln	Val	Glu	Glu	Asp	Thr
	610					615					620				
Ser	Cys	Ser	Asp	Ser	Lys	Thr	Leu	Cys	Thr	Gln	Asp	Ser	Glu	Ser	Thr
625					630					635					640
Glu	Ile	Pro	Leu	Asp	Glu	Gln	Val	Glu	Glu	Glu	Ala	Val	Gly	Glu	Glu
				645					650					655	
Glu	Glu	Ser	Gln	Pro	Glu	Ala	Cys	Val	Ile	Asp	Asp	Arg	Ser	Pro	Asp
			660					665					670		

Thr

<210> 7
 <211> 15
 <212> PRT
 <213> Homo Sapien

<400> 7
 Met Met His Val Asn Asn Phe Pro Phe Arg Arg His Ser Trp Ile
 1 5 10 15

<210> 8
 <211> 687
 <212> PRT
 <213> Homo Sapien

<400> 8

Fig. 7.6

370/375

Met	Ala	Phe	Val	Trp	Asp	Pro	Leu	Gly	Ala	Thr	Val	Pro	Gly	Pro	Ser	1	5	10	15
Thr	Arg	Ala	Lys	Ser	Arg	Leu	Arg	Phe	Ser	Lys	Ser	Tyr	Ser	Phe	Asp	20	25	30	
Val	Asp	Asn	Gly	Thr	Ser	Ala	Gly	Arg	Ser	Pro	Leu	Asp	Pro	Met	Thr	35	40	45	
Ser	Pro	Gly	Ser	Gly	Leu	Ile	Leu	Gln	Ala	Asn	Phe	Val	His	Ser	Gln	50	55	60	
Arg	Arg	Glu	Ser	Phe	Leu	Tyr	Arg	Ser	Asp	Ser	Asp	Tyr	Asp	Leu	Ser	65	70	75	80
Pro	Lys	Ser	Met	Ser	Arg	Asn	Ser	Ser	Ile	Ala	Ser	Asp	Ile	His	Gly	85	90	95	
Asp	Asp	Leu	Ile	Val	Thr	Pro	Phe	Ala	Gln	Val	Leu	Ala	Ser	Leu	Arg	100	105	110	
Thr	Val	Arg	Asn	Asn	Phe	Ala	Ala	Leu	Thr	Asn	Leu	Gln	Asp	Arg	Ala	115	120	125	
Pro	Ser	Lys	Arg	Ser	Pro	Met	Cys	Asn	Gln	Pro	Ser	Ile	Asn	Lys	Ala	130	135	140	
Thr	Ile	Thr	Glu	Glu	Ala	Tyr	Gln	Lys	Leu	Ala	Ser	Glu	Thr	Leu	Glu	145	150	155	160
Glu	Leu	Asp	Trp	Cys	Leu	Asp	Gln	Leu	Glu	Thr	Leu	Gln	Thr	Arg	His	165	170	175	
Ser	Val	Ser	Glu	Met	Ala	Ser	Asn	Lys	Phe	Lys	Arg	Met	Leu	Asn	Arg	180	185	190	
Glu	Leu	Thr	His	Leu	Ser	Glu	Met	Ser	Arg	Ser	Gly	Asn	Gln	Val	Ser	195	200	205	
Glu	Phe	Ile	Ser	Asn	Thr	Phe	Leu	Asp	Lys	Gln	His	Glu	Val	Glu	Ile	210	215	220	
Pro	Ser	Pro	Thr	Gln	Lys	Glu	Lys	Glu	Lys	Lys	Lys	Arg	Pro	Met	Ser	225	230	235	240
Gln	Ile	Ser	Gly	Val	Lys	Lys	Leu	Met	His	Ser	Ser	Ser	Leu	Thr	Asn	245	250	255	
Ser	Ser	Ile	Pro	Arg	Phe	Gly	Val	Lys	Thr	Glu	Gln	Glu	Asp	Val	Leu	260	265	270	
Ala	Lys	Glu	Leu	Glu	Asp	Val	Asn	Lys	Trp	Gly	Leu	His	Val	Phe	Arg	275	280	285	
Ile	Ala	Glu	Leu	Ser	Gly	Asn	Arg	Pro	Leu	Thr	Val	Ile	Met	His	Thr	290	295	300	
Ile	Phe	Gln	Glu	Arg	Asp	Leu	Leu	Lys	Thr	Phe	Lys	Ile	Pro	Val	Asp	305	310	315	320
Thr	Leu	Ile	Thr	Tyr	Leu	Met	Thr	Leu	Glu	Asp	His	Tyr	His	Ala	Asp	325	330	335	
Val	Ala	Tyr	His	Asn	Asn	Ile	His	Ala	Ala	Asp	Val	Val	Gln	Ser	Thr	340	345	350	
His	Val	Leu	Leu	Ser	Thr	Pro	Ala	Leu	Glu	Ala	Val	Phe	Thr	Asp	Leu	355	360	365	
Glu	Ile	Leu	Ala	Ala	Ile	Phe	Ala	Ser	Ala	Ile	His	Asp	Val	Asp	His	370	375	380	
Pro	Gly	Val	Ser	Asn	Gln	Phe	Leu	Ile	Asn	Thr	Asn	Ser	Glu	Leu	Ala	385	390	395	400
Leu	Met	Tyr	Asn	Asp	Ser	Ser	Val	Leu	Glu	Asn	His	His	Leu	Ala	Val	405	410	415	
Gly	Phe	Lys	Leu	Gln	Glu	Glu	Asn	Cys	Asp	Ile	Phe	Gln	Asn	Leu		420	425	430	
Thr	Lys	Lys	Gln	Arg	Gln	Ser	Leu	Arg	Lys	Met	Val	Ile	Asp	Ile	Val	435	440	445	
Leu	Ala	Thr	Asp	Met	Ser	Lys	His	Met	Asn	Leu	Leu	Ala	Asp	Leu	Lys	450	455	460	
Thr	Met	Val	Glu	Thr	Lys	Lys	Val	Thr	Ser	Ser	Gly	Val	Leu	Leu	Leu	465	470	475	480
Asp	Asn	Tyr	Ser	Asp	Arg	Ile	Gln	Val	Leu	Gln	Asn	Met	Val	His	Cys	485	490	495	
Ala	Asp	Leu	Ser	Asn	Pro	Thr	Lys	Pro	Leu	Gln	Leu	Tyr	Arg	Gln	Trp	500	505	510	
Thr	Asp	Arg	Ile	Met	Glu	Glu	Phe	Phe	Arg	Gln	Gly	Asp	Arg	Glu	Arg	515	520	525	

Fig. 7.7

371/375

Glu Arg Gly Met Glu Ile Ser Pro Met Cys Asp Lys His Asn Ala Ser
 530 535 540
 Val Glu Lys Ser Gln Val Gly Phe Ile Asp Tyr Ile Val His Pro Leu
 545 550 555 560
 Trp Glu Thr Trp Ala Asp Leu Val His Pro Asp Ala Gln Asp Ile Leu
 565 570 575
 Asp Thr Leu Glu Asp Asn Arg Glu Trp Tyr Gln Ser Thr Ile Pro Gln
 580 585 590
 Ser Pro Ser Pro Ala Pro Asp Asp Pro Glu Glu Gly Arg Gln Gly Gln
 595 600 605
 Thr Glu Lys Phe Gln Phe Glu Leu Thr Leu Glu Glu Asp Gly Glu Ser
 610 615 620
 Asp Thr Glu Lys Asp Ser Gly Ser Gln Val Glu Glu Asp Thr Ser Cys
 625 630 635 640
 Ser Asp Ser Lys Thr Leu Cys Thr Gln Asp Ser Glu Ser Thr Glu Ile
 645 650 655
 Pro Leu Asp Glu Gln Val Glu Glu Glu Ala Val Gly Glu Glu Glu Glu
 660 665 670
 Ser Gln Pro Glu Ala Cys Val Ile Asp Asp Arg Ser Pro Asp Thr
 675 680 685

<210> 9

<211> 585

<212> PRT

<213> Homo Sapien

<400> 9

Met Lys Glu Gln Pro Ser Cys Ala Gly Thr Gly His Pro Ser Met Ala
 1 5 10 15
 Gly Tyr Gly Arg Met Ala Pro Phe Glu Leu Ala Ser Gly Pro Val Lys
 20 25 30
 Arg Leu Arg Thr Glu Ser Pro Phe Pro Cys Leu Phe Ala Glu Glu Ala
 35 40 45
 Tyr Gln Lys Leu Ala Ser Glu Thr Leu Glu Glu Leu Asp Trp Cys Leu
 50 55 60
 Asp Gln Leu Glu Thr Leu Gln Thr Arg His Ser Val Ser Glu Met Ala
 65 70 75 80
 Ser Asn Lys Phe Lys Arg Met Leu Asn Arg Glu Leu Thr His Leu Ser
 85 90 95
 Glu Met Ser Arg Ser Gly Asn Gln Val Ser Glu Phe Ile Ser Asn Thr
 100 105 110
 Phe Leu Asp Lys Gln His Glu Val Glu Ile Pro Ser Pro Thr Gln Lys
 115 120 125
 Glu Lys Glu Lys Lys Lys Arg Pro Met Ser Gln Ile Ser Gly Val Lys
 130 135 140
 Lys Leu Met His Ser Ser Ser Leu Thr Asn Ser Ser Ile Pro Arg Phe
 145 150 155 160
 Gly Val Lys Thr Glu Gln Glu Asp Val Leu Ala Lys Glu Leu Glu Asp
 165 170 175
 Val Asn Lys Trp Gly Leu His Val Phe Arg Ile Ala Glu Leu Ser Gly
 180 185 190
 Asn Arg Pro Leu Thr Val Ile Met His Thr Ile Phe Gln Glu Arg Asp
 195 200 205
 Leu Leu Lys Thr Phe Lys Ile Pro Val Asp Thr Leu Ile Thr Tyr Leu
 210 215 220
 Met Thr Leu Glu Asp His Tyr His Ala Asp Val Ala Tyr His Asn Asn
 225 230 235 240
 Ile His Ala Ala Asp Val Val Gln Ser Thr His Val Leu Leu Ser Thr
 245 250 255
 Pro Ala Leu Glu Ala Val Phe Thr Asp Leu Glu Ile Leu Ala Ala Ile
 260 265 270
 Phe Ala Ser Ala Ile His Asp Val Asp His Pro Gly Val Ser Asn Gln
 275 280 285
 Phe Leu Ile Asn Thr Asn Ser Glu Leu Ala Leu Met Tyr Asn Asp Ser
 290 295 300

Fig. 7.8

372/375

Ser Val Leu Glu Asn His His Leu Ala Val Gly Phe Lys Leu Leu Gln
 305 310 315 320
 Glu Glu Asn Cys Asp Ile Phe Gln Asn Leu Thr Lys Lys Gln Arg Gln
 325 330 335
 Ser Leu Arg Lys Met Val Ile Asp Ile Val Leu Ala Thr Asp Met Ser
 340 345 350
 Lys His Met Asn Leu Leu Ala Asp Leu Lys Thr Met Val Glu Thr Lys
 355 360 365
 Lys Val Thr Ser Ser Gly Val Leu Leu Leu Asp Asn Tyr Ser Asp Arg
 370 375 380
 Ile Gln Val Leu Gln Asn Met Val His Cys Ala Asp Leu Ser Asn Pro
 385 390 395 400
 Thr Lys Pro Leu Gln Leu Tyr Arg Gln Trp Thr Asp Arg Ile Met Glu
 405 410 415
 Glu Phe Phe Arg Gln Gly Asp Arg Glu Arg Glu Arg Gly Met Glu Ile
 420 425 430
 Ser Pro Met Cys Asp Lys His Asn Ala Ser Val Glu Lys Ser Gln Val
 435 440 445
 Gly Phe Ile Asp Tyr Ile Val His Pro Leu Trp Glu Thr Trp Ala Asp
 450 455 460
 Leu Val His Pro Asp Ala Gln Asp Ile Leu Asp Thr Leu Glu Asp Asn
 465 470 475 480
 Arg Glu Trp Tyr Gln Ser Thr Ile Pro Gln Ser Pro Ser Pro Ala Pro
 485 490 495
 Asp Asp Pro Glu Glu Gly Arg Gln Gly Gln Thr Glu Lys Phe Gln Phe
 500 505 510
 Glu Leu Thr Leu Glu Glu Asp Gly Glu Ser Asp Thr Glu Lys Asp Ser
 515 520 525
 Gly Ser Gln Val Glu Glu Asp Thr Ser Cys Ser Asp Ser Lys Thr Leu
 530 535 540
 Cys Thr Gln Asp Ser Glu Ser Thr Glu Ile Pro Leu Asp Glu Gln Val
 545 550 555 560
 Glu Glu Glu Ala Val Gly Glu Glu Glu Ser Gln Pro Glu Ala Cys
 565 570 575
 Val Ile Asp Asp Arg Ser Pro Asp Thr
 580 585

<210> 10
 <211> 507
 <212> PRT
 <213> Homo Sapien

<400> 10
 Met Ala Ser Asn Lys Phe Lys Arg Met Leu Asn Arg Glu Leu Thr His
 1 5 10 15
 Leu Ser Glu Met Ser Arg Ser Gly Asn Gln Val Ser Glu Phe Ile Ser
 20 25 30
 Asn Thr Phe Leu Asp Lys Gln His Glu Val Glu Ile Pro Ser Pro Thr
 35 40 45
 Gln Lys Glu Lys Glu Lys Lys Arg Pro Met Ser Gln Ile Ser Gly
 50 55 60
 Val Lys Lys Leu Met His Ser Ser Ser Leu Thr Asn Ser Ser Ile Pro
 65 70 75 80
 Arg Phe Gly Val Lys Thr Glu Gln Glu Asp Val Leu Ala Lys Glu Leu
 85 90 95
 Glu Asp Val Asn Lys Trp Gly Leu His Val Phe Arg Ile Ala Glu Leu
 100 105 110
 Ser Gly Asn Arg Pro Leu Thr Val Ile Met His Thr Ile Phe Gln Glu
 115 120 125
 Arg Asp Leu Leu Lys Thr Phe Lys Ile Pro Val Asp Thr Leu Ile Thr
 130 135 140
 Tyr Leu Met Thr Leu Glu Asp His Tyr His Ala Asp Val Ala Tyr His
 145 150 155 160
 Asn Asn Ile His Ala Ala Asp Val Val Gln Ser Thr His Val Leu Leu
 165 170 175

Fig. 7.9

373/375

Ser	Thr	Pro	Ala	Leu	Glu	Ala	Val	Phe	Thr	Asp	Leu	Glu	Ile	Leu	Ala
			180					185					190		
Ala	Ile	Phe	Ala	Ser	Ala	Ile	His	Asp	Val	Asp	His	Pro	Gly	Val	Ser
		195					200					205			
Asn	Gln	Phe	Leu	Ile	Asn	Thr	Asn	Ser	Glu	Leu	Ala	Leu	Met	Tyr	Asn
		210				215					220				
Asp	Ser	Ser	Val	Leu	Glu	Asn	His	His	Leu	Ala	Val	Gly	Phe	Lys	Leu
225					230					235					240
Leu	Gln	Glu	Glu	Asn	Cys	Asp	Ile	Phe	Gln	Asn	Leu	Thr	Lys	Lys	Gln
				245					250					255	
Arg	Gln	Ser	Leu	Arg	Lys	Met	Val	Ile	Asp	Ile	Val	Leu	Ala	Thr	Asp
			260					265					270		
Met	Ser	Lys	His	Met	Asn	Leu	Leu	Ala	Asp	Leu	Lys	Thr	Met	Val	Glu
		275					280					285			
Thr	Lys	Lys	Val	Thr	Ser	Ser	Gly	Val	Leu	Leu	Leu	Asp	Asn	Tyr	Ser
	290					295					300				
Asp	Arg	Ile	Gln	Val	Leu	Gln	Asn	Met	Val	His	Cys	Ala	Asp	Leu	Ser
305					310					315					320
Asn	Pro	Thr	Lys	Pro	Leu	Gln	Leu	Tyr	Arg	Gln	Trp	Thr	Asp	Arg	Ile
				325					330					335	
Met	Glu	Glu	Phe	Phe	Arg	Gln	Gly	Asp	Arg	Glu	Arg	Glu	Arg	Gly	Met
			340					345					350		
Glu	Ile	Ser	Pro	Met	Cys	Asp	Lys	His	Asn	Ala	Ser	Val	Glu	Lys	Ser
		355					360					365			
Gln	Val	Gly	Phe	Ile	Asp	Tyr	Ile	Val	His	Pro	Leu	Trp	Glu	Thr	Trp
	370					375					380				
Ala	Asp	Leu	Val	His	Pro	Asp	Ala	Gln	Asp	Ile	Leu	Asp	Thr	Leu	Glu
385					390					395					400
Asp	Asn	Arg	Glu	Trp	Tyr	Gln	Ser	Thr	Ile	Pro	Gln	Ser	Pro	Ser	Pro
			405						410					415	
Ala	Pro	Asp	Asp	Pro	Glu	Glu	Gly	Arg	Gln	Gly	Gln	Thr	Glu	Lys	Phe
			420					425					430		
Gln	Phe	Glu	Leu	Thr	Leu	Glu	Glu	Asp	Gly	Glu	Ser	Asp	Thr	Glu	Lys
		435					440					445			
Asp	Ser	Gly	Ser	Gln	Val	Glu	Glu	Asp	Thr	Ser	Cys	Ser	Asp	Ser	Lys
	450					455					460				
Thr	Leu	Cys	Thr	Gln	Asp	Ser	Glu	Ser	Thr	Glu	Ile	Pro	Leu	Asp	Glu
465					470					475					480
Gln	Val	Glu	Glu	Glu	Ala	Val	Gly	Glu	Glu	Glu	Glu	Ser	Gln	Pro	Glu
				485					490					495	
Ala	Cys	Val	Ile	Asp	Asp	Arg	Ser	Pro	Asp	Thr					
			500					505							

Fig. 7.10

Exon start	Exon end	Exons	142207	444645	641649	736254	861791	1044051	1273404	1354347	1414511	1436943	1445217
mRNA/cDNA variants			142328	444775	641878	737226	862202	1044190	1273709	1355128	1414702	1436979	1445290
			4D7-1	4D7-2	4D7-3	4D4	4D5	4D3	4D6	4D8	LF1	LF2	LF3
Isoform													
mRNA/cDNA variants	UO2882	4D4									*	*	*
	L20969	4D5				*					*	*	*
	AF012073	4D3					*	*			*	*	*
	L20970	4D2									*	*	*
	AF012074	4D3						*			*	*	*
	U50159	4D2											
	U50158	4D1											
	U50157	4DN3											
	AJ250854	4D4				*	*				*	*	*
	NM_006203	4DN1									*	*	*
	AJ250852	4DN2				*	*				*	*	*
	AJ250855	4DN3									*	*	*
	BC008390												
novel cDNA identified by deCODE													
RT-PCR		4D6							*				
CAP-RACE		4D7	*	*	*						*	*	*
CAP-RACE		4D8								*	*	*	*

374/375

Fig. 8A

Fig. 8B

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 September 2002 (26.09.2002)

PCT

(10) International Publication Number
WO 2002/074992 A3

(51) International Patent Classification⁷: C12N 9/16,
C12Q 1/68, C12N 15/52, A61K 38/46

(21) International Application Number:
PCT/IB2002/000565

(22) International Filing Date: 25 February 2002 (25.02.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/811,352 19 March 2001 (19.03.2001) US
10/067,514 4 February 2002 (04.02.2002) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier applications:
US 09/811,352 (CON)
Filed on 19 March 2001 (19.03.2001)
US Not furnished (CON)
Filed on 4 February 2002 (04.02.2002)

(71) Applicant (for all designated States except US): DECODE GENETICS EHF. [IS/IS]; Sturlugötu 8, IS-101 Reykjavik (IS).

(72) Inventors; and

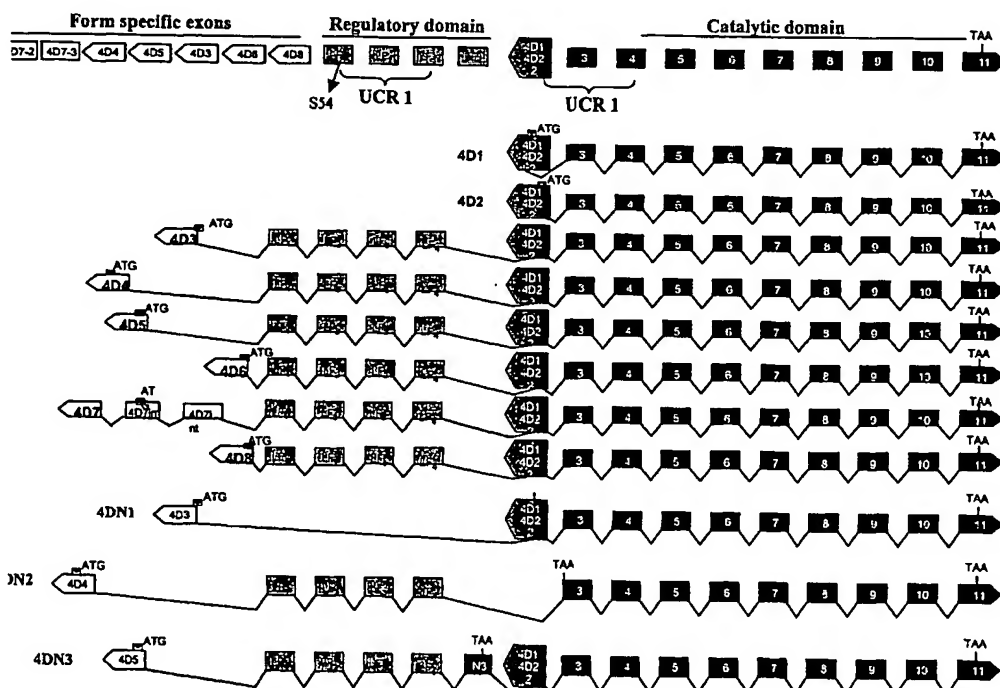
(75) Inventors/Applicants (for US only): GRETARSDOTTIR, Solveig [IS/IS]; Smaragata 6, IS-101 Reykjavik (IS). JONSDOTTIR, Sif [IS/IS]; Vesturgata 73, IS-101 Reykjavik (IS). REYNISDOTTIR, Sigridur, Th. [IS/IS]; Stórgarði 8, IS-108 Reykjavik (IS).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: PHOSPHODIESTERASE 4D GENES RELATED TO HUMAN STROKE



(57) Abstract: A role of the human PDE4D gene in stroke is disclosed. New exons, referred to as 4D7-1, 4D7-2, 4D7-3, 4D6 and 4D have been identified. Moreover, three splice variants have been identified. Methods for diagnosis, predictions of clinical course and treatment for stroke using polymorphisms in the PDE4D gene are also disclosed.



Published:

— *with international search report*

(88) Date of publication of the international search report:

8 April 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N9/16 C12Q1/68 C12N15/52 A61K38/46

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C12Q A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GRAEME B BOLGER ET AL: "Characterization of five different proteins produced by alternatively spliced mRNAs from the human cAMP-specific phosphodiesterase PDE4D gene" BIOCHEMICAL JOURNAL, PORTLAND PRESS, LONDON, GB, vol. 328, 1997, pages 539-548, XP002150449 ISSN: 0264-6021 the whole document	1-18,22, 26,30, 32,34, 35,39, 40,42, 43,47-50
A	---	19-21,59
	-/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

23 October 2002

Date of mailing of the international search report

05. 03. 2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Patrick Andersson

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	XAVIER MIRÓ ET AL: "Phosphodiesterases 4D and 7A splice variants in the response of HUVEC cells to TNF-alpha1." BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol. 274, 2000, pages 415-421, XP002902795 ACADEMIC PRESS ISSN: 0006-291X the whole document	1-18,22, 26,30, 32,34, 35,39, 40,42, 43,47-58
A	---	19,20,59
X	WO 01 00851 A (MEMORY PHARMACEUTICAL CORP) 4 January 2001 (2001-01-04) the whole document	1-18,22, 26,30, 32,34, 35,39, 40,42, 43,47-58
A	---	19-21,59
X	WO 00 23091 A (SCUDDER KURT MARSHALL ;BIOIMAGE A S (DK); THASTRUP OLE (DK); BJOER) 27 April 2000 (2000-04-27) the whole document	1-18,22, 26,30, 32,34, 35,39, 40,42, 43,47-58
A	---	19-21,59
X	WO 00 40714 A (ARROW AMY ;OLIGOS ETC INC (US); THOMPSON TERRY (US); DALE RODERIC) 13 July 2000 (2000-07-13) the whole document	30, 48-51, 54-58
A	---	59
A	WO 00 77226 A (KAPELLER LIBERMANN ROSANA ;WHITE DAVID (US); ROBISON KEITH E (US);) 21 December 2000 (2000-12-21) the whole document -----	1-22,26, 30,32, 34,35, 39,40, 42,43, 47-59

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 02/00565

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 19, 44-46
because they relate to subject matter not required to be searched by this Authority, namely:
see FURTHER INFORMATION sheet PCT/ISA/210
2. ☒ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-59 (partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-59 (partially)

Each sequence of SEQ ID 1-10 and 12 represent one invention.

2. Claims: 1-59 (partially)

Each sequence of SEQ ID 1-10 and 12 represent one invention.

3. Claims: 1-59 (partially)

Each sequence of SEQ ID 1-10 and 12 represent one invention.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Claims Nos.: 19, 44-46

Claims 19, 44-46 relate to methods of treatment of the human or animal body by surgery or by therapy / diagnostic methods practised on the human or animal body / Rule 39.1(iv). Nevertheless, a search has been executed for these claims. The search has been based on the alleged effects of the compounds/ compositions.

Continuation of Box I.2

Claims Nos.: 23-25, 27-29, 31, 33, 36-38, 41, 44-46 and parts of 40 and 42.

Claims 23-25, 27-29, 31, 33, 36-38, 41, 44-46 and parts of claims 40 and 42 relate to agents interacting with a polypeptide encoded by a phosphodiesterase 4D gene or the expression of this gene.

These claims could include known compounds e.g. known phosphodiesterase inhibitors. Moreover, the description does not give any example of such substance. Identification of agents with the claimed methods does not give the identified agents PER SE any unique properties and thus, the description lacks disclosure and the claim lacks support within the meaning of PCT Articles 5 and 6.

A meaningful search of claims 23-25, 27-29, 31, 33, 36-38, 41, 44-46 and parts of claims 40 and 42 is impossible and consequently, the claims have not been searched.

The following parts of claims 40 and 42 have been searched: A phosphodiesterase 4D gene PER SE; fragments, variants or derivatives is considered to be unclear, e.g. fragment could in its extreme be one single nucleotide.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 02/00565

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0100851	A	04-01-2001	AU 5886400 A EP 1190070 A1 JP 2003503063 T WO 0100851 A1	31-01-2001 27-03-2002 28-01-2003 04-01-2001
WO 0023091	A	27-04-2000	AU 6189999 A WO 0023091 A2 EP 1146888 A2	08-05-2000 27-04-2000 24-10-2001
WO 0040714	A	13-07-2000	AU 2480800 A CA 2357950 A1 EP 1141278 A2 JP 2002534086 T WO 0040714 A2	24-07-2000 13-07-2000 10-10-2001 15-10-2002 13-07-2000
WO 0077226	A	21-12-2000	US 6146876 A AU 5608000 A EP 1192261 A1 JP 2003502046 T WO 0077226 A1	14-11-2000 02-01-2001 03-04-2002 21-01-2003 21-12-2000

347/375

CATCCCATCAATACCGAATTTATTGAGAGTTTTTAGCATGAAGTCCTGTTGAATTTTGTCAAAGGCCCTTTCTGCATCT
ATTGAGATAATCATGTGGTTTTTGTCTTTGGTTCTGTTTATATGATGGATTACGTTTATTGATTGTCATATGTTGAAGC
AGCCTTGCATCCCAGGGATGAAGCCCACTTGATTAGGGTGGACAAGCTTTTGTATGTGCTGCTGGATTGGTTTGGCCAG
TATTTTATTAAGGATTTTTCATCGATGTTTCATCATGGATGTTGGTCTAAAATTCTCTTTTTTTTGTGTCTCCGCC
AGGCATTGGTATCAGGATGATGCTGGCCTCATCAAATGAGTTAGGGAGGATTCCCTCTTTTTCTATTGATTGGAATAGT
TTCAGAAGGAATGTTACCAACTCCTCTTTGTACCTCTGGTAGAATTCAGCTGTGAATCTGTCTGGTCTCGGACTTTTTT
TGGTTGGTAGGCTCTTAATTATTGCCCTTAATTTCAGAACCTGTTATTGGTCTATTACAGGGATTCAACTTCTTCTGATT
TAGTCTTGGGAGGGTGCATGTGTCCAGGAATTTATCCATTTCTTCTAGATTTTCTAGTTTATTGTGTAGAGGTGTTAT
TCTCTGATGGTAGTTTGTATCTCTGGGGGATTGGTGGTGGTATCCCTTTTATCATTTTTTATTGCATCTATTTGATTCT
TCTCTCATTTCTTCTTTATTAGTCTTGCTAGTGGTCTATCAATTTTGTGTGATCTTTTCAAAAACCAGCTCCTGGACTC
ATTGATTTTTTTGAAGGTTTTTTTGTGTCTCTATCTCTTCAGTTCTGCTCTGATCTTAGTTATTTCTTGCTTCTGCT
AGCTTTTGAATGTATTTGCTCTTGCTTTCTAGTTCTGTTTAAATTGTGATGTTAGGGTGTCAATTTTAGATCTTCTGCT
TTTCTCTGTGGGCACCTTAGTGCTATAAATTTCCCTCTACACACTGCTTTAGAATGTGTACAGAGATTCTAGTATGTT
GTGCTTTTGTCTCAKYGGTTTTCAAAGAACATCTTTATTTCTGCCTTCATCGCATTATGTACCCAGTAGTSATTCAGGA
GCAGGTTGTTTCAGTTTCCATGTAGTTGAGTGGTTTTGAATGAGTTTCTTAATCCCAACTTCTACTTTGCAGCTGTGGTCT
GAGAGAAAATTTGTTATAATTTCTGTTCTATTACATTGCTGAGGAGTGCTTTACTTCCAACCTATGTGGTCAGTTTTGG
AATAACTGTGATGTGGTGTGAGAGAATGTATGTTCTGTTGATTGGGGTGGAGAGTTCTGTAGATGTCTATTAGGTC
CGCTTGTGTCAGAGCTGAGTTCAATTCCTGGATATCCTTGTTAATTTTCTGCTCGTTGATCTGTCTAATGTTGACAGT
GGGTGTTAAAGTCTCCCATTAATTATGTGTAGAAAGTCTAAGTCTCTTAGTAGGTCTCTAAGGACTTGCTTTATGAATC
GGGTGCTCCTGTATGGGTGCATATATTTAGGATAGTTAGCTCTTCTGTTGAATTGATCCCTTTACCATTTTGTA
ATGGCCTTCTTGTCTCTTCTGATCTTTGTTGGTTTAAAGTCTGTTTTATCAGAGACTAGGATTGCAACCCCTGCTTTT
TTTTGTTTTCTATTGCTTGGTAGATCTTCTCCATCCCTTTATTTGAGCCTATGTGTCTCTCATGTGAGATGGG
TCTCTGAATACAGCGCACTGATGGGTCTTGACTCTTTATCCAATTTGCTAGTCTGTGTTTTTAAATTGGAACATTAG
CCCATTTACATATAAGGTTAATATTGTTATGTGGGAATTTGATCCTGTCTTTATGATGTTAGCTGGTTATTTTGCCCAT
TAGTTGATGCAGTTTCTTCTAGCCTTGATGGTCTTTACAATTTGGCATGTTTTTGCAGTAGCTGGTACTGGTTGTTCC
TTTCCATGTTTAGTGCTTCTTCCAGGAGCTCTTGTAAAGGCAGGCCCTGGTGGTGACAAAATCTCAGCATTGCTTGTCTG
TAAAGGATTTTATTTCTCTTCCCTGTGAAGCTTAGTTTGGCTGGGTATGAAATCTGAGTTGAAAATCTTTTYCTTT
AAGAATGTTGAATATTGGCCCCCACTCTCTTCTGGCTTATAGAGTTTCTGCTGAGAGATCAGCTGTAAGTCTGATGGGC
TTCCCTTTGTGGGTAAACCCGACCTTCTCTCTGGCTGCCCTTAACATTTTTCTTCTCATTTCAACTTTGGTGAATCTGA
CAATTATGTGTCTTGGAGTTGCTCTTCTTGAGGAGTATCTTCTGTCGATTTCTCTGATTTTCTGGAATTTGAATGTTGGC
CTGCCCTTGCTAGGTTGGGGAATTTCTCCTGGATAATATCTGACAGAGTGTTCCTCAACTTGGTTCCATTCTCCCATCAC
TTTCAGGTACACCAATCAGATGTAGATTTGGTCTTTTCCATAGTCCCATATTTCTTGGAGGCTTGTTCATTTATTTT
TACTCTTTTTTCTCTAACTTCTCTTCTTGCTTCAATTCATTCATTTCAATTCATTTCAATCTTCAATCAGTATACCCTT
TCTTCCAGTTGATGGAATTGGCTACTGAACTTGTGAATGCATCATGTAGTTTCTCATGCCATGGTTTTTCAGCTCCATCA
GGTCATTTAAGGTCTTCTCTATGCTGGTATTCTAGTTAGCCATTTGTCTAATCTTTTTTCAAGGTTTTTAGCTTCTTT
CCGATGGGTTTGAACATCCTCCTTTAGCTCGGAAAAGTTTATTACCCATCGTCTGAAGCCTTCTTCTCTCAGCTTGTC
AAGTCATTTCTCTGTCAGCTTTTGTTCGGTGTGAGGAGCTGCATTCTTTGGAGGAGAAGAGGAGCTCTGATTTT
TAGAATCTTTCAGCTTTTCTGCTCTGCTTTCTCCCCATTTTGTGGTTTTATCTACCTTTGGTCTTTGATGATGGTGACG
TACATATGGGGTTTTGGTGTGGATGCCCTTCTGTTTGTAGTTTCTTCTAACAGTCAGGACCCCTCAGCTGTGGGTCT
TGTTCCAGTTTGTCTGGAGGTCCACTCCAGACCTGTTTTCCTGAGGATCACCAGCAGAGGCTGCCGAACCGCAATATT
GCAGAACGGCAAATGTAGCTACCTGATCCTTCTCTGGAAGCTTCATCTCAGAGGGGCATCTGAGCTGTATGAGGTGTCA
GTTGGCCCTACTGGGAGGTGCTTCCAGTTAGGCTACTCGGGGTGAGGACCCGCTTGAGGAAGCAGTGATGCTGTCATT
CTCAGATCTCAAACCTTCATGCTGGGAGATCCACTACTCTTTTCAAAGCTCAGTTGGAAATGCAGAAATCACCCGCTTCT
TGCATCACTCATGCTGGGAGCAGTAGACTGGAGCTGTTCTTATTTGGCCATCTTGGAACTCCCCAGCTATACCTACT
TTATTGGATTTTTGTGTCTCCATCAGCTGACATGGTACTTACAGCCTAGAATGAGCATACAAAGGATACTCATTCGCTA
TTCGATGATGACTGACAAACAGTCTCCAGGATCACCATGAAATAACTAACTGAGTTTGATTTATTTAAAAATCAGGT
CCAGGTAACAACTGCACCTGTCCCCTGAATTGATACAAATAAAAAATAAAACAAAAAAGGACAATATTTTACTTTATG
GAACTTTTTATTACAAAGAATTAAAAAATAAATAATACTTAAAGAATACTTTGACTATTATTTTATCACCT
AAAGGCTTCTCTTATTATTTTATTTTGGAGACAGAATCTCTGTACCCCGGCTGGAGTGCAGTGGCGCGATCTCAGCT
CACTGCAACTTCTGCCTCCCGGGCTCAAGCAATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACATGAGTGCACC
ACCACACCCTGCTAATTTTTTGTATTTTTTAGTAGAGACAGGGTTTTACCATATTGCCGAGGCTGATCTCAAACCTCTGA
GCTCAGGCAATCTGCCTGCCTCGGCCTCTAAAGTGCTAGGATTACAGGCATGAGCCACAGCGCCCTGCCAACCTAAAG
GCTTTTCACTGGAATTCATGAATGTTGTATCATTAAGCTAATGTGGACCTTGGATAACTGTATGCCTRTTTTC
TGGGAAATAATGGTGGAGCTCTTTGAAAGGTAAGCAATCTGGAATTGAAATAATTTGATAACATCAGCTAATATTTTC
AAAGTTAGATTTTTGAGGTATAATTTACATAAGAGTTACTCTTCTAGAGGTATAGTTGAATGCATTTTCAAAATGTG
TACAATTGGATAACCAACCACATAATCTAGATATATAGTTAGTGTGTAATATAATATATGTACTATATAATATAGG
ATATTTATACCACCCAAAAAGTTTTCTCTGCTTTTTTATAGTATGTTCCCAACCCACGTCAGTGTGCTGATTGTCCCT
ATGGTTTTGCTTGGCAGAATGAATAATACATTAAAGATATAGCCTTTTGTGAATGGCTTCTTCTCACTTACAATACTTT
TGAGTTTTGAGTTGAATTATAAGTTTCACTTATAATACATTTTGTGTTATTGTCATCTATTGGTAATTTGTTTCAATTTA

348/375

TTGCTTTTTAGTATTTTCATTTTTTTCCAGTATGTCATTTTATGGACACAATTTGTTTACCCATTACCCAGTTGACTGAT
 ATCTGAACGTGTTTCTGGGTTTCTGCTATAGAGAGTTGCTATAAACATTTTCATATAGGTCTTTATATAGACATATGTTT
 TCATTTCTCATGGGTAGATACTTAGAAGTAGGATTGCTGGGTCATATGGTCACTCTACTTTTTAACTTTATAAGAACT
 GTCAAACCTTTTTCCAAAGTTTCTATACCATTTTGCATTCTCACTAGCAATGTATGAGAATTTAATTTGCTCTGCATCC
 AGGCCAGCATTTTGTATTGTTTGTATTTTGTATTTTATACATTCTAGTAAGTATGTAGTGTGGCATCTCACTGTGGTTT
 TACTTTTTGTTTCCCTAATGTCTAATGATGGTCRTGGATCTTTTCACATGCTTATTGATCTTTTGTATTCTTATGAAGT
 GTTTGTTTGTTCAAATCTTTTGACCATCTTTTCACTGGATTGTCTCTTATTGTGTGTAAAGATTTTTTAAAAAATAA
 TTTCTGGATACAAGTCCTTTATTTGATATGCATTTTGTACATATTCCTTCTCAAGTCTGTGGCTTGTGTTCTGTTTT
 CTTAACAGTTTTTTTTCAAAGAGAAATTTGGTAAAGTCCAGTATACCATTTTTTCATTTTATGCTTCATGCTTTTGTGGTT
 TAAGAAATCTTTGCCTAACGCAAGATCACAACACTTTCTACTGTGTTTTCTTCTAGAAGTTCTTTAGTTTTAGATTTT
 ACATTTAGTTCTATGATTCATTTCAAGTAGATGTTAGTGTGGTGCAGGATAAAGGTTGAAGTTTCTTGTTTTTATGAGTG
 GATGCTCAATTGTTCAAGCATTTCTTTGTTGAAAAGAATATCATTTCTCTTTTATAGCTCAAATTTTATTAATAAATT
 ATTTTAAGATGCACATATTAAAGTGATATGTGTAAGGATTATATATTTCTGGAAGCATGCCTATTTACACTAGTTATT
 ATTACTTTAGGAGACAGATATTCTCTTTGTTTAAATTGTTTCCACAAAGCATAACCAGAGTACAGAGGGGACATTAGT
 AACTATTTTATGATGATTATGGTATTCATTTAGGCCAATTTAAGTGAATTGGAGATCCTAATTTTCTCTATAAGGAGAC
 AATACTTTTTCATACAAGATTATTTTGTGGAGGCTTCATTTATGTGAAGTTTTTGCACCCATTTATTGTCATGATTAT
 TCTTCAGTGAAACAAAAGTCTGTAGTAGATATGCTGCTGCTGCTGGTTTTAGGTAAATTGACTAAATAGTTATACAAAA
 CTCTGTCCTCACCATATATGAATTCAAACTGTATCAACAATTACAGAATACTATGCTAACATCTAATAAGAGAGTTAGC
 CCATGTAGAAGAGAAATATAAATACAGCTATCAGATCAGTCTCATGTTTATTTTCAAGCTTCAAGGAGCCTCTAGCAAAAA
 TGGTTTTCTTTCTCCATACATGTTGCAGGTGTTTACTATTTTAAATGAGACTTTTTTGTGTTAAAAAATAAATAAG
 ATCATTTAGAGAACGATTCTCAGCTTGTTCAGATGATTATTTGGTTTTAAAAAAGCAGCCTGGAGTTCTCTTAATCTC
 AAATCTCCATAAAACTTACAAGAGATGTTTTTCATTTACTGAAAGGAATAGTTTTTCTTAATCAAATGTAGAGCCATTA
 TCACTAGAGGGCAGTAAATACAAACAGATTTAGTGGATTACTGGCACAACGATGTTTTTCAAGAATACTAGCATTAATC
 AAAGAAAGTATAGTTTTTATAATATGAAAATACATGTAACATTCTGTTATGTAAATATTGGTTATGAATCAATTCTAG
 ATTATTGCTGCTCTAAATATTTTTAAGGCATTTGAAAGCAAAGGGAGGCTGAGAAACACTAGTTTTCTGTGGCTAT
 TCTGTTTAATACTTGAAGTTTAACTTTGCCTCAGAATTCTTCAAGGGACATTTAAAAATTAGATTTGCATTTGTTCAAG
 CTGAACAGTACTGGATATATGAGAGACCAGTTATATAGATTTGCTTCTTGATTAATAACTACCACGACTTTAATTTT
 AAGGTGAAAGGTGTAAATAAATGTAGATTGATTATAGGATAAAATATTTTCCAATAATGTAAGTCTACTGCAACAG
 TGCTACTGCCTGGAAAACCTCTTATGTTGGAGAGGTCCAAGAGCTAATACACTTATTTTAAACAATATTTCTTAAATAT
 TTCAAACACAGTAATATAATATACAGCTTAGAATTGATTATATTAACGGATCTATTATGTAGGCTCTAGGCTAAATATA
 AAATAATGCCTGAAATAGTTTTCTTTTTTGGCAATTTAGAGTACTCTGAAACCAGACAGTCTGGGTTCAAATCCTGGC
 CCTGTTACTTACTACTGGCTTTGTGACCTTGAGCAAGACAACCTTGACCTCTCTGAGCCTTAGTTTTCCCATAAATTTAGT
 TTTGTTTTTCCCTATTCAAATATGCATCTTTTCTCTCTTGACCTCTGTTACAAAGTCAATAATGACAGCATGTGTTAAT
 GTATCAGCAGTTTCACTCCATCAGCAGAATTTCAAATATCCTGAAATGTACTGAAATAGTTCAAAAAGATTGTTAATTG
 CTTGGGTATCTGGTAAGGACTGAGAAAACAAGGAATAGCAGGGAAGTGGCCTCTAGAAATTCTGAGGGGTATTTCTAGG
 AAAAGTCTGAAAAAGAGAACTAAGTGAACATTATGGGAATTTTTTTTTTCTTTTTTGGAGACAAGGCTTGTCTGTCTCAT
 CAGGCTGGAGTACAGTGGTGAATCATGCTCACTGAGCCTTAAACTCTGGCCTCAAGCATCTCTCCACCTCCACCTCAGC
 ACCTCCACCTCCACCTCAGTAGTATCTGGAACACAAGCATGCCACCACCTGGCTAATTTTTTAAATTTTTTGT
 AGAGACGGTGGTTTTCTCTATGTTGCCCAGGCTGGTCTCGACCTCCTGGCCTCAAGCAATCCTCCCGCATTTGGCCTCCCA
 AAATGTTGGGATTACAGGCATGAGGCACCTTACCAGGCCAAGAACTATTTTTTCTATTTCAACAAACACACTTGCATA
 TATGTATATAAAATCATTTGGGCATTTGAGAGCAGTGGATTACAGATAAGAAACCTGAGCTCTAGCTGTAACGCTGTCC
 CTCAAGTTGTGTGTGTCAGAACTTTTCTGGACCTCAGTTCTTGTCTGAATGTGTCTGTCATCATTACATCTGCATATGAG
 GGCAGCTGTGTGTTGTTTACATAGCGCTCCCAAACATAAGCGTGTCTCACTATATGGCAGGGCTGTCTGCCTGTGGGCA
 CCTGCTTCTCACCCTGTCCAGAGATCTGACCATGGTGATAGTAACCATGATTCTTTAATTCAAGGCATCTGTAAAGTTA
 GCAAAAAGATTGAGGATAAACAATCCACTCCTAGATTTCATACCTGTTTATCATAGAGTTTGCATCAGCCTAATTATATG
 ATGAGCTGTCTACACCATTAAGAGCAAGGACTGGGTTTGCATTTCAATCCTGTCCCTATGGAGCAAGTTATTGAATA
 TGTAAGAAGGTCCATCTTTTCATGTTAAATAGGGATAATATTTATCTTATCAGAATGTTGCCAAGATTAGAAATGAGG
 TATGTAAAGTTCTTTGTGCATAGTAGGTGCCCTAGTAAATGTTGTAACCTTATTAAAGTTTCTTCTAATTAATTTGGTGAAG
 CCAAGTCTGACTATAAGAAATTGTATCTCTTGCTCTATTCAAATTTCTCTTCTAATTTATCTAGATTCTCTCTGCAGA
 TAGCAGCTACCGTGGCAATAGGAAGGAGATTCTAGTCTCTTAGAAATGGAGATTAGGGAAAATGAAATGAATTTTAATT
 TGGCTCAGAGATTTTTGAAAAGATTCTTATTTCCCTAGAAATATGGAACCTTTCTTGGTACTTTTTTACTCAATATGAT
 TAAATAATCTCCCTTATTGCGCAAAATAGGGACTTATTTGAATAAGTTAAATCCTTTTACATCCAGCACCTATTAGAA
 TGCCTGGCACATAATAGTTGCCAAATAGAAGTCTGTTGAATGAAGGGACCATCACTCACATTCAGCAGGGAGAAGAGGC
 TGCAGATTTTAGAGGGAAGGGAACTGTATGTGTGTTTCTGCATAATGTTTTAAGACAAGGAGTATTATCTACTATATG
 TAATCTGTTTTAAATGTTTTTGTATGATTTTGTCTGAGGGTGAACCCCTTGTCTTCTTCTGTCACCTATAATCAGTATAA
 AAATATTGATGTTTTGTCATCTGCATCAGCCAACAACCTTTTTTGTGGCAATAGTACACTACCTTGAGAAATACAGGGACA
 TAATAAGATGTTTTCTGGCCTCAAAGATCCTTCAACCTGGATGAGGAGTCAAAGTTGAAGACAGTCTGAAAGAAATAGA
 ACAGTGATTCTTAACACTGGGGAACATTCAGGAAATTTTCAAGGGACAGTGACTGGGGAGTACTCTGTGTGTCTCCACACAA
 CAGAGGCCAGGGAGGCTAGATGTCTGGGATACATGGGACAGCCTTTTACCAGGGAGGTTTGTGTGTCTCCACACAA
 CTTCCAAAAGTCCCAGCAGCTATTCACATAGGTGAAAAAACAATGCATTTATAATTCTCTGAGCCTAGAACCCAAC

349/375

TACTTTTACGTATAAGTATTAAATATTTTTACATGGTTTTAATCCACACCAAATTTTCTAGTAATGCAGCAATAGTGT
ATATTGTGAAGATGGCACTTTGTTCATTTTGAAACCTTTCAAAGAATCATTCATCATATCAGGAAAAAGGAAAATTTTT
CTAACATAACACCCCTGTATTCTTTTCTGCTACTGTTACTTTTTGTGGTAATTCCTCCCATAGAGAAATCATAGCAA
ACCCCTTAGATAGCACTTACTGTTCTAAGAGCCTTATGTATATGCACTAATTTAATCCTCACAACAACCCGTAAAGGTAG
AACTATTATTCTCATTTTCCATGTGAGTAACTGAAGTATGGGAAATTTAAATAGCTTCCCCAAGGTCACACAGCTAA
TCAGTTATAGTAGTTTTTGTACTACTTTTTTAAATGTAGTTGTGTACAAGTATTTTATATTTTGTAGTATTTGATAGAAAT
TACTCATTTCTCCTTTATTTTCACTGATAAGCCATTATACCTGATTTTTTTTTTAAATCTATGTAGGGAGTATTTAGCCCTA
TATGTATTCAGTACAGTATTATGAAGGAAGTGTATTTTAGGAATTTTCATTTTCAGGATGAATACTTGTATATAAAAGTAAA
AAGTAACTGAGTCTTAAGTTTTGTCAAAGAATAAAATTTGATGGATGGATGGATTTTTTTTTTTTTTAAAGGAGGGGGAAGG
CAGTGAGCCTGACTGCAGAGTGTAAATTTGCATTTAAATGACAAGTGGTATGACACTTCCACCTGTTCTTTCAGGGAGCCT
CACCAAGTATGTTTTGCCTCGAGGCCTTTGCTTTTGCCATTCCCTCACTTGGTTTTTCCCTTCTCTACCTACCTCTCACC
CCGCAATCCACATGGCTTGTTCCTTTCTTCAGATCTCCTGGTATACGTCATCTCATCAGAGGGGCTTTCCATGATCAC
CTTATAGCAACCTCTATCCGTAATCCTTATCCCTTCTTTCTCTCCATTGTGCTTATCACCCCATGACGTATTATGTATT
TATTAACCTAGTTTTTGAATATAAGCTGCAGGTGAGAAAGCTTTGTTTTCTTTCTCAGGCAGTGCCTGACATAGAGTA
GGAGCTTAATAAATATTGAATGAAGGGCAGATGTAGAATCGTTAGAATTTGGAAAAAGGCTGGAATATTTGGTCCATA
GATGTACTTTGAATGATTTAAATCTGACTGAGAAAACCACTTTGAGGTTGGCAGAGTAGAAGAAGGAGGATTTTTAGG
CCGAGAATTTGGTAAGACAGAGATGGGATGTCTAGCTGTATGGTGAAGGTGGAGGARTACTAGTCTTTTCAGGAACAGAG
CAAATGTAATAGAGCAGCTGAAAAATAGGCTTGGCGTTGGGGATTAAGGTCAGATATGGCAGTCTGGAAATTTACAGAGGG
ATGTGATGAAGCAGGCATTACTAGCTTTGAAGTAACAGGCTGCGGCTGGATTTGAGGAAAAATGATCTGGCAGTAGAGG
TCAATATGAGACTAGAAGGGGAAAAAGCCAGGGGGCAAGAAGATGAGCTAAGAAGCAATTACAGCATTTTGGCCCTGAGAC
ATGGAGTGCTGTGATGCAATTGAAAGGAAATATAACATATATATTTTAAAAACAAATGACAAACCAGAGAATTTTTTTA
AATATTAGTATAATAGAATGATTATCATAATGATCATTGTCACTGTCTCTTTACTGTCTGATACCTACTTATCTTCAA
CTTTGTACCATTTGTTGTTTTAAGTGCTTTGCATATATGGTCTCATTTAATCCTCATATGTATCTGTTCTGGTTATTTA
TTGCTATGTAAGAAATCACTTCAAACCTAATACTTTGAAATATGAATGATTTTTATTTAGTTTTCATGGCTTTGTGGGT
TAAGTGGTCTTGGCTAGACATTTCTGCTTGGCATTCCATATGGTTGCAGCCAGTGGGTAGCTATCTGAAAGCTGAA
CTGGCTGGATGGCTAGGATGGCTTCTTGCCCCCTCAGTCTGGCTCTGGGCTGGGGTGGCTGGCATTTGCTGAAGACTGGC
CAGGCATGTGTCTCTTTCTTGTGCAAGTGCTCTCTTGGCGCTTTCTCTCTTCACTGTCTGTGAAGTTAAACATGGACTTC
TTGTAGCATAGCCTCTCAGAGTAGTCAGACCTTTTTTTTTTTTCAACCTAATGGCTTAGGGGTCCCAATAGCACATTCAA
AGAAAGCAGGATGAGAGCTGCAAGATTTCTTATGACTTAGCCTCAGCAGTCATGCACCATCACTTGTGTTGTTACACAAG
CCAACCTCAGATTCAGTGTAGGACAGTGTGGCTCATTAAGAGTATCTTTGGAGACTAGCTGCCACAGTAATCCACTTTAC
AGATGAGGAAGCTGACACACTAAAAAGATTATTTGTCTAGTGATTGTGCACAAAAGATTTAACTTGAATTTCTGTTCT
CAGTACCAGAGTGAACCTGGGAAATCATTTTTTCTCTCTAGGTCTCACTTTATGTGGAATGAGGGAGTTAGAGGGG
GTGATATTAAAGTTACTTTCTATTTCTCTCAGTCTTTTAAATATTTGGATTTCAGATTACGGGAGGGGTAATGGTAAGGA
AYAACTGAAAGAAACAGCTCTGGATAAAAGATAGGGCTTGCTAACAAAGTTGAATGAAGGAGGGAAGGTGATGCCGTA
TAGGGGAACATGCCGGGTTACTCAAGGATTCAGCTAGATGGTTTATATTAAACACCTGACAGTGTCTGACGCACATGAA
ACACCTGTTGAATGGTAGGAAAGAGTCATAGATTCCATCTGAGATACTGGAAGAAATATAGGCTCACTGACTGAAATGG
AAGTAATTATACTAAGAACTACTTTAAATAGAAAAATGTCTCACAGTTTTGAAAAAGTTTGTGCTGACTAGCAGGGCAT
TCGAGAGGAGAATCTTGATTTCAGAAATATGGCACTGAAGTTCAAGTTAGAAGTGGTCATTGAAGATTGTGGGCCTAGG
GAAATTAAGAAGTTTCAAGATCCTGGGAGTTGAGGGAGAGTAGTAGGAATGATCAAAACATGTGGAACACTTCAGAGAA
GTAGGGAGACCAGAGAAAAGGAGGACCTTAGTATTCCTCTGGGGGTAGCTTTAGTGGAATGTTGGAGCTTTAATTTCTT
CCTTTTGTAGAGGAGTAAGAGTGATGGAATGAATACAACAGATGTTAAACAAAAGCAGAGGACTGTAGCAGCTAAAGGC
CAATAGAAACTCAGAGAGACAGAGTGTACAGGAGTGCTTATCAGAGAGCATGCTCTCTAAGACAGACATGCCACATGT
GGAAATAGTTAAATGTTCAGGAAGACTGCAGAGTAGCCATACAGCAAGTTAAAGCACAGAGTAGTAAGCACAGGCTTTG
AGATGGAGAGGAGGTAATAATGCACAGAATTATATGCTAAAATCAACTAAAACCTAGTTTTTCTTGTGTTTCTCACCCACA
AGACCTCTTTAGTATTAAAGTTACAGGGTAATACTACACCAACCAATAGAAAATGCTGTTTTTCTAGAAAAGAACTTT
GATTTCTCATTTAACCCTCCTCGTAAAATGTCTGATTACTCTTGAGCTCAATTCTGGATTCTTAAGAGCCACTCATTCC
TTTCTTAACCTTTGTGTACAGTTATTAAATGTTCTGTCTGGCTGGGCACGTTGGCTCACACCTGTAATCCAGCACTT
TGGGAGGCTGAGGTGGGCAGATCCCCTGAGGTGAGGAGTTTGGAGACCAGCCTGGCCAACATGGTGAAATCCCGTCTCTG
CTAAAAATACAAAAATTAGCCAGGCGTGGTGGTGGGCGCTGTAATCCAGCTTCTCGGGAGGCTGAGGCAGGAGAATC
GCTTGAACCCGGGAGGCAGAGGTGACAGTGAGCCAAGATCGCACTACTGCACTCTAGCCTGGGCGACASSGAGACTCTG
TCTCTAAATAAATAAATAAATAATTTCTCTCTGATCAAAATACAGATCCTGAGTTCTATATACAAAACACTGCATTCT
TATGCATACACAGTGCCCTAGCTTTTCATTTCCCTCCCCCAGAATTGCAAGTGGTCCCACCCCTAGATTTTGAAGGT
TTTGAACCTCTGTCTATACATAACAATAGAAAACAAAAGGAGCTGAGAGCAGCCATGSCACACAGGTGAGGGAATGTGTCA
TTGCCATCTGTGCCATCTGTGAATTTCTGGACATTAGTCGTATTGTTTAAATCCCTATGCTTTTATGTTGGATGAGGGGAG
AACTACAGTCATTTCTACATCACCAGGGAGCCACTTGTTTTGGATTTGAGAGAGGGAAGCAATTAAAATGCTCGATTGC
CATTTTTGGAGCAGTTTTTATTTGGAAGGAAGGGAAGCCAGAGGACATTAAAATTCATAGAAAATGCCCTCCAAAAGGA
TGGGCAATTCTTAAGAATGAACACGAATTTTGGAGGATTTTATGGTCATTATTTCATCACTGCAAGAGGGAAGCCCCGT
TCATCTTTTCTCAGGGTGGCCTCAGAGCTGCAGGGATACCATATTCAATGGCGTTTGTGCGGTGAGGAGAAAGCCTCC
CCAGAGGCTGGCCCTTGCCAACCAATCCCAAAGCAGCCTGCACCGAGGCCACACCCCTCGCCTTATAGGCTAAGAGCT
GGAATGCAATTGGTGAGAGTTGGGGTTTTATGGGAGGGGCTTCTGTCACTCTTCCCGCTTCCCTGCAGTTCTTTAT

350/375

TTGGTAGCTTTTGACAGGACTAGCCTTTCTTGCAACTAAGCATCTTGACATACATTATTCATTAAGCCCTGGAGCTCGG
GAGAGAAAGATGCAGACCCTTAGATCTTTAGATATTCCTTTATCACGTGGATTTTCTTTATTGAGAATAGTTGCTGAAT
TTTGTGCCATTCTGGAGTCTTACAAATGGCATGTATTTCGATGGGAAGACGGCTGGATGGGATTTAATGCGAGGCTTTCT
TATGTATACCTTAATTACCAAAAATCTTTAAAACTCATACTCTGCGTGGCTTGTGGAGGTTGTTAAAGTGTGAGATTT
TGAAGCTAAATACATTTTAGAGCTKWCTATATATATACATATATATATATATATACATATAATCAATCAAAAATGCCTG
AAGCAAATATTTACTGTCTAGTGTCTTGGGGCTACATAAAGGTAAGACTTACTTAGCTTTTGAAAACTCCTTACTCTGA
TTACAAAATTTATTTAGAAAGCTTAGACTCTACTGTAATTTGTTCAAACATCAGTTATGTATTCTTTCTTACACATGA
ACTAGGAAGAAATACGTGTTAATAGTGGTCAAGATAAGATTGTATAACTTTTCATCAGTTGTAGTTTGAGTGTAAAAATA
GCTKTTTGTAGATACGCAGTAGTTCTTCTGTTTGTCTGTGTTATATGTTTGAATTGTGCTTGAAAAATATATGGTAATT
AAATACATTCATTGCAAATAAATTATTGGGCCAAATTACTTATACTGATTTATGGATTCCAGTTAGTATGTTGCACATA
AAGTTTATAAAATTAATTTGTGGCTGTTTCTAAAAATCTATACTACTTTAACCTGACGAGGAATACGTTTTTTTCACTT
TTAGCTATAAAGCCCTAGGTGACATTAAAAATTGACATTACTTAACTATGTAAGTGATACTAAAGTGAAAACTTGATTG
TCTATATACCTTGCAAACTGAACAAAGTTTTTATTACACTGTTTTGTGAATCTCAAGAAATGAATTAATAAACAATTC
AATAAGATTGTGTCCATGCTTGGCAGGCTTTTTCCATGCCCTGTGGTAACATTAGCATTGTGATCCTGTCTCCACAATA
GAAGGAGGTAGAAAAACCTTATTAGTCTTAAATGAAACATCACTTCACAGATTTTTGGTATTTGAGCCACTCGCTTGA
ACCTGGGAGCCAAATCACAACACATTTTAAAAGATTCATTTTCTGTTACTCTGAGGATTTTTTCAAGATTGGAGTGTGTC
GTTTGCTTTGTTTCTTTCTTTTGAAGGACAAGTTCCCTTTGTTTTAGAGATTTACTTGAATTTCTAAAAAATTAGAA
AACTATTTTCACTCTTGGTTRTCCAAGTAGTCTAGTATCCCTTACCTCCCTTTAAATCTGTGGATGATTCAGATTTTTAA
AAATGTTTTTAAAAATATATAGACTTCCATTATTTGAATTTTGTAGCCATWCTTGGCTAAAAATCTTCAGAAATGCAG
AAAAGTATAGAGAGTAAATATAAGAWGCCCTCATTATCCGCCAGAATTCAGCTCCTAGCTTTTAGCCAGCTCACAACCTG
ATGTTATTTTGAAGSGCTTCCACTTTGTACTGTGATTGAACCAATTTGTACTATGATTATGAACAATATTGCCAAGA
ATCTACATATAGAAATTTTAGTACGTTTTCTTTTGAAGGAAAAATTTTCTGGACAGCTTTATGTTTTAATACATGTACCTTT
AAAAACATGTAAAAATAGCAAATATAGATATATTTGGTCTTATGCATTTTGAAGGTTTTATTTTTATACCATTCAATGGA
GTATTTGTTTAAATAACTTTGAATACTGATATCTACCAAACCTTGAATGCATCAGTGCAGCATATTCAAATGATTTT
TAGCAGAATATTGTCAGGAAAAAATAAGAAAATTTTCTTACTATTGGACCCATACCACCTCCTTAAATATATATTGGGA
GGATATATAATATACCCAGTAGCACACTGGCGTGATGTAGAAGTAAAGGAGATTACATTTAAGGACATTTTGTGTTTTATT
ATTTTAGTTTGCTTCTGAACAATCTTAAATGCCCTAATGTAAATTGAAGAATTGCAGTTCTGAAAAGCAAAATACAGTA
TTGAGATTCAACTGCATTTTACTTTCTTTTATGCCCTTAACTGCTGTACACAGACATTTCTGATGTATAATGAGAACAAA
GGATTCAAAGCATTCACTTAGAAATCCTCCCTGTTTTTTTAGTTGCAACCCCTAAATCTGTGTATTGTTTTTCACTA
CTTAGGCCAAAAACAATTAGAAATTCATCAATGGAAAATATTTAGAGGTCACTTAAAAAATAAACTAAATGCTTAAAT
GGTTCTGCATTTTACAATCGGTTCTGTTTCAAACAGCAGTTTAAATGTTTTGTCCCTTCTAAATATATTAAATTGAGAAATA
TGATGGGATTTCCAGAAAGATACATTGTATTAGCTTTTAAATCAGTCCCTTCCCTTTGGTAAATTTTATGTAGTTATCT
TAGTAAATATTATATAATTTATTTTAGATGAGAGAAGTATCACATTTTTTAAATGTTTGTGTAATGATCTAGTGCATTTT
TTTAGTACATCTAGCTATGCACTCCAAACCAATTTGTGAGATCAACTACCAGTTGAGAAAGCACTTATGGTAATTTTT
GTGGTTATTTCATTTAGCTTTGCTGGACTGAACTTTTATATGGATAGCAAAAAAGGAAAACAATGTTAATTCCTTTAG
AAAATACCTTTGTGTTATACTTAATGTACGCTTCAGAAATATCTTTAGGAAATTCCTTAGACCGTCTTCTTAGAGTAG
AGAAGTAATTGCTTCAAATATTGTCTTTTATAATTATGTTAAATGAAATGTTGACTTCCTTGGAGTCCCTTATAAGCC
TTGGTAGGGAGGTGGGCATGTGATGGAGGATTTCTCCAATCCATGTTTTTGTGTTTTAAACAAAGGCTGGAAAGTACTC
TGGGAATAATGTATATGACCAAGATGAACATGACGAGATGTCACTTATCTAGTCTGTACAATATTAGATTCTCTTTT
ACTGGCTTTTTTCTTCAGTTATCTGTACTAATCGCTATTTTGGTGAATTTGTTAAGCAAACTGCCAGGAAAATATAC
TTCGTTCTTTTATATTCTTTTGAAAAAATCCAATAATATATGTAGCATATCTGCAGGTAGCATCCACATGTTCTCTTTGG
GCAACATAATCCTTATACTAGTTTGTGTACAAAGTTAGAAGATAAACTGTGATAACTGGGTCTCTATCTATCTTTTATCA
ATCACTCCCAGAAGGCTTCCCTTGTGTTTTATTGAGAGAAAGTGAAGGAGGGCAGCAGTTCTGTATAGACTGCTG
AGATTCTAGCAATGGTGAAAGCTTTGCCTCATCTCCTATCTTTTATGAAAAAAGACTTTGTCTAGCAGGAGGTATTC
TTAATAGCAACTTTTAGCTCATAACATGAACAATTTTAGGTCAAAGAGATATTTTCAATGAATGTGTGTTTTAAATGTTT
AGCAGACTCTTTTCTTTGGAATATGCTTTGCCTAATGAGTATATTTTCCAAGTGTGAATTTATCTGTAAAGCAAATTT
TTTTTAATTATTATACTTTAAGTTCTGGTATACATGTGCAGAACGTGCAGGTTTGTACATAGGTATATACATGCCATG
GTCGTTTGTCTGCACCCATCAACCTGTCTATCTACATTAGGTATTTTGCCTAATGCTGTCTTCCCTCCCTACCCGCTSA
TAGGCCCTGGTGTGTGATGTTCCCTCCCTGTGTCCATGTGTTCTCATGTTCAACTCCCACTTATGAGTGAGAACATG
TGGTGTGTTGGTTTTCTGTTGCTGTGTTAGTTTGGCTGAGAATGATGGTTTTCCAGCTTCATCCATGTCCCTGCAAAGGACG
TGAATCATCCCTTTTTATGGCTACGTAGTATTCATGGTATATATGTGCCACATTTTCTTAATCCAGTCTATCACTGA
TGGACATTTGGGTTGGCTCCAAGTCTTAAGCAAAGAGTTTTTTAAACCTGTGTATGCATGACATTTTAGCTGTGCTTTT
GAGACATAGCTATGGTTTCCATACTAATGCTATTCCAAATCTTTATGGGATTTGAGAAAGAGGAGCTAGCTATTTAA
GTAATATTTTTATGGTTATACTACAGTCAAATCCTTCATCTGTCTGACCTGCAATGATAAAAAATCAGCTATTTACTT
TAAAGGCCCAAAAGTTATGGACCAAGTGCCAGAAAGTGAGCTGGGAGAAAGAACTCAAATAATATTGAGCATCTACTA
TGTGCCAGCTAAATAGAAGACACTTCTATATTAGCTCATTAAATATATGATAGCCATAATTTACTCAAGAAAATAT
AATTTGTAAAGAGGGGACAGAAAAAATTTGAACCTCTATTATAAATGTCTACAAATATTCTTAGAAGGCCCAAGTTTA
TTTTTTTTCAGTAGGTTATAAGATATAATGCTGAGTGAACACAAGCAGTAACCTATGTTCTGTATACCACTGATGCCATG
TTTTTAAATATGTATTACATACAAGGGTAGAAAAAAGGCATAAAAGGAAATTTAACAATATCTGTGTTTATCTTC
CAGCAGTGGGATTTACATTATTTTCTTTTTTTTGGTATAGCTTTCTACATTTTCTATAGCACATGTACATTTTATAAT

[illegible]

352/375

TACTAACCTTAGAATATAGTTTTTTCAGTCACTTTCTTGTGTCTGCTTCTTTCTTCATATCCATTTCTCTCTCTTATT
GACCCTTTGTCTCCAGCTTAGGGTGGGATTTAAATGAGAAGTTGAGGCTGTCTGATAGATATCTCGGGACCGAAATGGGAAA
CTTCAGCCCTAGAGAGGACGTTGATTTTTAGTTGGTGTGATGCAGGGGTTGAGTTAATAGTCTTGAGCTGGAGCTGCCT
CCATGATAATGGGACATAGAAACTTTTAGAGTTGGCACCTCATTCTGACACCATAACAGCTAGGCGTAGTATTCTTGG
GTTCCAGCAGGACAACCCAACTCTGGTTTTGTCCCAGAGTCCCTGGATCTTCTCAGAGGTTCCCATTTTTCTCACTAGA
CATGTGAGAGTGCAGTTGCCATTTCCAGGTTATCCACTGGCAACACTGGTGTGTGATTTTTTTTTTAAACATACCTA
TGGAGAAAATTTTTACATAAAGACAAAAATGTTAAGATGATTTTTTTTTCTACAGGAACGGGATTTATTAAAAACATTT
AAAATTCAGTAGATACTTTAATTACATATCTTATGACTCTCGAAGACCATTACCATGCTGATGTGGCCTATCACAACA
ATATCCATGCTGCAGATGTTGTCCAGTCTACTCATGTGCTATTATCTACACCTGCTTTGGAGGTAAATCTGTTTCTGAA
ATTTCAAGAACACTAACTTGCCACTCATAAAGGTCTATTAACTTTTTATCTGAAGGGTTTTCAATGGAGAAGATAATTG
GATTCATTGGAAGTATAACTTATTGACTTATGGGGGAAAATGCTATAGTTAATAGACAATCAAGTCTTTGATGGATTTT
GCTTATGAAAGTTGGTTCACAGATTTAGTGATTGATCTGTTTATGATATTGCTTCTTTGAAATGATCCACTGAACATTTT
ATAAAGCACATCTGGCTTACTCACTTTTTGTTCATTTGTTTTCTTGAAATCTAGTCTGACGGCTTTTATTTATAGGCCA
AAGAACGTTTTATAAAACATAAGCAATATATTGATATTTTTTCATAGAATATATTAGAAGGACATACTTTAATTTTTCT
AAATCCTAAGAAGTTATTTTCATTAGTTGTTTACTAAAGCAATTTGATTTTTCTTAAGAAATATATTTTATAATTCAGTTT
GTTTTTCATTATAAAATTTATGTTAATACCTCATCATATGGGTGAGTGATTCTCAACTGGAGATGGTTTCTCTTCCCTTT
CTTTCCCTCCTGCCACCACCAGGGACATTTGGCAATGTCTGGAGGCATTTTTGGTTGTCACTATACATTTTTTAGT
TGTACATGATACTGGCATCTTGTGGTAGAGGCCAGGAATCTGCTAAAAATCCTACAATGCACAGGACAGCCTCCAC
GCAAGAGTTATTTGGGCCCAAATGTCAATAGTGTGAAGTTGAGAAACCTGGTTTCGATGAAAGAAAATAATTGCTA
ATGTCTTACTAAATTTTATGTACATTTTCAAGATATTCTTAGACATCTTAAATATTTAGAAAATAAACTATTATTTCTT
TTAAAATAATTTTCAAGTTTTTTAAATAATATTTTAAAAAATACAGTGAATGGAAAACATTTGATCATGAGATGTAATAA
AATTAGATAAAATATTTTCTTCCAAGATTATATCTTAAAGTTTACAAGTATCTAAGACTCTCCCTTGACACATTGTAA
CACATTTTGAAGCTTCATTTTGTTCATTTTAAATTTAGAGATTTCTTATTGTTTATACTTTTAAATTCATATCATT
GTAGAATAGTAATATTATCTATATTGTCTGATTTTCCAGGCTGTGTTTACAGATTTGGAGATTCTTGACAGATTTTTG
CCAGTGCAATACATGATGTAGATCATCTGGTGTGTCCAATCAATTTCTGATCAATACAAGTAAGTAACTTTATTTTT
TCAGAACACATTTTTCCCTTGTACATTTTAGAATGACTAAGGGTCTTTATAAACTCAGAGTCTTCCAGAGCCATAATGT
TCTTTTGAGATGTGTATATATGTGTTTTAGTGATAGTTTCATGTTAATGTAATTTAACTGAAAATTATCATTATATCCCT
TGAGGCATGTGATATTTGAAAATGTGTTCCAGTTCTCTTTAAAGTAATATATTGCTGTGTTACTAGACAAGGGTAAT
TAAAAATGAAAGTGTGCAGAAAGATTTAGAAAGTTGTATTGGCCCTAAAGTTTAAATTAAGAAAAGTTATGAGAAT
TAATGGTAAGTGTTCCTCACTTTATGTAGGTCATCTTAATCCTCTTCAGAGGCCATAGCTTCCCTTCCCTCCTCCATG
CCCAACCCCTGTTCTTTCTTTTAAATCTTCTAATAAGGGTAACAGGAACCTCTTAATATTYTTTCAACCATTGGT
TTTTTCTCACTGTTAACATCTCACCTTATAAGAAGTCATCACTGAATTTGGAAATATAAGGAATAGTAGAGACTGTTTA
ATATGGAGCATCTCTGACATTGCCGCACAGAAAGCCTGTGTAGGGAATGTTTAGGTAATGCTTGAGCTATCCCTTGGA
AAGAGATTTAGGTTTATAGAAATTTCTATTTGGTACTTGAAGTTAATTGGTAAGTGATTTAAGTGAACATGACTTAATT
CCCTCCCATATGGTAGATTATAAATTTAGGTAGATTATAAATCATAAATTCAC'TTTTATATATAAAAAATATGCAAG
TTGTTGAAAATGTTGTATGCTTAAGAATCCACCTTCTTTTCATTTTGTCTTGAGGCTATGAATAATAGTCTTCTCGTGC
CTATAGCAATCTAGCTATAGAATTTATTAATTCACCATTCATTTCCGTACTTTGCTGTAGCCAGATTTAAGAAG
GAATGTAGAGGTAACCTTGCTTTGAGAGATTTAATTCAGAGCTTTAGGATTATTTACCTATTTTTATATCTTATAATGG
CCTCTGGACTATCTTATAGCAAAATATACTCTAATGACTCATCCATGTAGAGGACTGGAAAAGTCAGGGATTTCTGAG
ATGTGTGGTTAGTCAAGTATTTTTTACAAGTTTAGTTTAGGAACCTTATTTATCCAGATTAGACAGGATAACATTTTCAT
GTTCTACCTACCTATGAGCACCCTAATGAGGTACTTTTAGAAGTCAAGCATCAAGCATACATACAAAATTAATATACATT
GGATGCAGCTCCCTGCATTTACATGGTATCAGTGGGGAGGTATCAGTGGGGAGGGTTTCATTATGTCTTTCTAAGAAGA
GCAGGGAGGTATGCAATACAGTGCATGCTGGCACTTTACATGAGCCTGGCCTGATTTATTTTGATGCTTTGAATGTC
TTGAGATATTCTGAATTTTATCAATTTTATGTAATACATAAAATGTATTTTACATAAAATTTTGTGTTAAAGGTAT
ATATATATATCTATCTTAAACACCAAACATTCAAACTGGTATGTTTTCTTTGCATTCTGTTATATAGCATATTATATGT
TCCCTTAGAATTAAGAGTAGATTTAGAAGACAAATTTAAACAACCTGATAGAAAGGTCAGTGTCTTCCAAGTACTCTGAT
ACATTTTTTAAAGGTAATGAGGACCTGCTCTATTCTTCATTCTTTGAGCCCTTAAAGCAGCAGTCTCCAATGTTTTTG
GCACCAGGCACAGGTTTTATGGAAGACAAATTTTTCCATAAACTGGGGGCGCAGGGAGAGAATGGTTTTGGGATGAAAC
TGTTCCATCTCAGATCATCAGGCATTAGTTAGATTCTCATAAGGAACGCACAACCTAGATCCCTTGCATGAGCAGTTCA
CAGTAGGGTTACAGCTCCTAGGAGAATCTAATGTCCTGCTGATCTGACAGGAGCGGAGCTCAGGCAGTACTGATGCG
GGCTTGCTGCTGCTCACCTCCTGCTGTGCGAGCCAGTTCTGACAGGCCACGGACCGATATTGGTCCACAGCCGATGG
ATGGATCGGGGACCCCTGCTTTAAAGGGCACTTGGGCTTTGACTGGCACCTGGAGGACCTTGGCATCAGGGTCCCTGTG
CAGTCTGCCATTTAAGCTAAACAAGGCCCTCAGTCTACAGATGAATCTGATACTCTAAAGTTTGAAGAACCAATGAAATAGT
GGAGGAACTGAAGAAGATAATTTTATCTCCTTAGGATGTCTGTTTAAAGTCATTTTGTGTTGACCTGCTGGGATGG
AAGGATAACTAATCCTGCCGCTGCAAAATCTTTCTTTGTTATTTAGTAATATTGCAATGATCTCCTTTCTGTGTGACCA
CAGCGACATAGGGAAGTTCACAGTTGCCAGAGTAGCTTTGGATTGCTAAAGTTTTTTTGACGATGAGGTGTGATGAGGC
TGTGTTATTTCTGAGGGAATGAATCAGCATGTGCTACTTTGTACAGGAAAGTATCCAGGGTTGTTCCGGGCCCCAGGGC
ATTATCAAAATACAGCCTTAGTTAGTTTGGCTAGGATCATGTAAGAGAATTATCTTCCAGCATGCAGTAAA
GGAATCCTTTCTAATAACTTGTAAACTTGTGATATGTAGCTTCGTGAAATATTTTATCAAAATTTGTGCTTATTTTAGT
TTGCAGTAAACCTTTTTTAAATTTGACTTTTTTATATTTTATGGATGGCTTGAGCATCCATGTGTCAAGCCAGCACATT

353/375

CTCAGCTCTTGGCCCTCAGAGCTGGAGCTGCCATCTCTGTCTCCAAAGCCTGCAGCTGTAATCCATATTTCCTATAATAAAGAAAT
TCTAAAGACCTCTGATTATCAAATTTATAAACCCATAGTTGGTTACTTGTCTTACTTTAAAGGAAGCTACGGAAGCAGCATG
AGAGCTTAAGGCACATGGGGGGCGCTGGGGATTCCCTTGGCTGGTTCCAGGGCAGTTAATCCTCCTGCTTCTTACATG
TGCTCTTCGTTTTTCTTAAATTAATTTAGTTGTTTTAGCTTTAGGTGCCAAATGATTTTATACTAATTGTATTTACACTC
GTTGAAAGCATGCTGGAGGTTCTGCAAGCAGAGAGAACAATTTCTACCTGGTAGAGTTGGTTAAGCTATAATAAATGATT
TGAGTGTGGGTACTGTGAACAGGATTTAGAGAAATTGAAATTTTCAAGCAGGAAGCTGCGTAAATATTTTTAAAGGATGA
TGCATATAAAATAAATCCATAGGCCAGGTGCAGTGGCTCACTCCTATAATCCAGCACTTTGGGAGGTCAAGATGGGTGA
ATCACTGACGTGAGGAGTTTCGGAGACCAGCCTGGCCAAACAAGGTGAAACCTGTCTTTACAAAAAAAATACAAAAAA
TTAGCCAGGTGTGGTGGCGCATGCCGTGATTCCAGCCACTCAGGTGGCTGAGGCAGGAGAATTGCTTGAACCTGGGAG
GTAGAGGTTGCAGTGAGCCGAGATCATACCATCACACTCCAGCCTGGACAAGAGTGAAACTCCATCTCAAATAAATAAA
TAAATAAATAAATCCATAAAATGTAAATAGCAGCATGAACTTTTGAAATATAAAATGCTGGAGGGTATATTTTAACCTTAGC
TTTTATTTCTGAAAAAAGTATCAAAAGTACAGAATATAGCAATTAATTTTACTTTGGCAAATGAATTTATTTTGTTAAT
AGCAAAGATGCCCTAAGTTTGGGGCAGAAAGATTTATTACATTAGTGATGCATTCAAAGCATGCGGTTTTTGGTTTTCCA
AGAGCAGAGGCATTTTATTATATTAAGGTTAAGATGTATCTAGCTGTCAGTATACACTTTTTTTATTTCTCTACTTTTTAT
TTTGAAATTAATAATTTTCATAGCTACACTAGTAGATTGTATGTAGAATTTTATTTTTCTGTATAAAACCCACACCTTCAA
AATAAGGATAAATTCATGTTTTATCAAATGTGATTATATAGATATAGCTACAGAGATTATTTTATTCAACAAMAATGTAC
TGCAAGCCTACTAAATGTTATAATAAATATTATTTTCAAGGCACCTAGGACACATGGSTGGACAAGACAAGACAAATCCCT
GGCTCTTAAAGACTTGGCATTCTGTCTAGCAAAGGTGGAGCATAATAAGTGAATTTATGGCATGTGATGGTACTAAGTGCT
ATGGAGGAAGAATAATGCAGGTGTAGGCTGAGGATAGAGTAGGAGTGAATGAGGCAGTTTTTCTGACAACTGAATATTAA
GTTAAACCACCACTTCCCTCTGTCAATTTCACTGGAGAAATGTTTTGTTTTCTGAAGTCCTTTTGAAAGATTATGTTTTATT
CAGTTGTAACTTAGAGACATGGGTGTAGCATGCTGTCAATTTTCTAACTAACTCAAGGCTAAGCTAGTAAGCTGTAGA
ACAGTGAGTGTAAGTCTTACTTACAGGATACATATCTATAGTGTCTGCCCCAGTCTTAACTGTTTCAAGTCCAGGCTTT
AATATTGGCTCTGATCTGCCATGTGGACTCCATCATAAGACACAAAAAGGCACAATACCTAGTGGACTTAGTTGGATTT
GGGAGGCAATGTATTCCTTCTTTGTGTGTGTTACTCTGGCCCATTTACTAAGTGATCTGAAAAGCTGCTAGTTTAGATG
GGGCACAGAACAAAGAGAGTGTCAAAAACTGCTAGTTTTGAGTGGGGCTCTACAACAGGTCCAGCCTGCTGTGCAAGC
TGCTCTGCACATGGGCCACATGATCCAGCAGATTTAATGGTGCTTGAAATGTGAGTGGCAGATAGGAATGTTGTTTGA
GCCTTTGACAGAGCCCTCTGTGTGAATCACAGCACAGACTCTGGAGCAAGACCTGCCATCATCAAAGAAAGATAACT
AACTACTCTCCTTTTGAAAGAAAGATATAGGCCTGCTGCTGGGCCCTTAGGAGATACTGACTGACTATGGGCCACCAAGT
TTCCATGTGGTTTAAAGCTGTCTGCCCATCATTAATAGGGTATTATCTAACGCGCCAAGCCATATGTTGGGCATGTACGA
CATTTTCATCATCAAATAAAAGTAGTGTAATACACGATCTATCAGGTCCGAGCAGACACTAAAGGCACAAATTACATAAA
GAAGTGGCCCTAATGCCACTCCTATTAAATTACACTGCCTTCTTTCTCCAGCCTACACATGTGGTGCATGGAAAGTTC
CTGCAAGTAGTTGACAGAGGGCCTGGTTTACGGATGGTTCTGCGTGATACGCAGGTACCACCGGAAGTATACAGCTGC
AGCACTACTGCCCTCTCTGGGACATCTCTGAAGGATGGTGGTGAAGGGGAGTCTTTCCAGTGGGAAGAACTTTAGGCA
AGGTGACTCGTTGTTCACTTTGCTTGAAGAGGGGAATGGCCATATGTGCAATTATATACCAGTTCATGGGCCGTAGCCA
ATGATTTGTCTGGATAGTGAGGGACTTAGAAGGAATATGATTGGAAGAACTGGTGAGAAAGAAATTTGGGGAAGAGATAT
GTGAATGATCTCTGTAATGGACAAAAAAGGAATGCTCACCAGGTGTGACCTTGGCAGAGGAGGATTTTAATAACCAA
GTGAATAGGATGACCCATTCTGTAGATACATAGTCAACTTGTGGTTCCTTACCACCCCTGTCTATCACCACCAATGCTAAGA
ACAAAGTGGCCATGGTGGCAGGGATGGAGGTGGCAGGATGTGCTTAGAAAACATGGACTTCCACTCACCAGGCTGACCT
GGCTATGACTATTGCTAAGTGCGCAATCCACCAGCAGCATAAAACCAACACTGAACCCCCATATAACACCATTGTTGGGG
GATCAGCCAGCTACCTGATGGCTGGTTGATTACATTGGACCCTTCCATGGTGGAAAGGGTAGCATTGTTGTCCTTAGTG
GAAAAGGCACTTTCTCTGAAAACAGATGTGCCTTCCCTGCAGTTTTTCTGCCAAACTATGGTATTCCATACAGCATTG
CCTCTAACCAGGAACTCACCTTACTGGCAAAGAAGAGCTGCACTGGGCTCATGCCCATGGAAGTCCCTAGTCTTACCAT
ATTCCCTAACATCTGAAATCAGCTGGCTTGATAAATTGGTAGAATGGCCTTTTGAAGACTCAGTTACTCAGCTAGGAGG
CAAGACCTTGCAGGGCTGGGGCAAGGTTCTCCAGAAGGCCATAAAGGCCATATATGCTCTGAATCAGCATCCAATATGT
GGTGCTATTTCTCGCATAACCAGAATTCATGGGTCCAGGAATCATTGGATAGAAATGGGACTGTTACGACTCATAATTA
CCCCAGTGACCCACTAGCAAAGTTTGCTTCTCTGTTCTCTGCAAATTTATGTGCTGCTAGCTAGAGGTCTTAGTTTTAGA
AGGAGGAATGCTTCTATCAGGAGACACAACAGTGATTCGTTGAACTGGAAGTTAAGACCTAGCCACTTTGAGCTCCTT
ATGCATCTGATTCAATCATCCAAGAAGGGCATTACAGTGTTGACTGGGGTGACTGATCCTGACTACCAAGGGGAATTG
GGTTACTACTCCACAATGAAGGTAAGGAAGAGTATGTGTGGAATAAGGAGATCCCTTAGGGCATCCCTTAGTATTAACC
ATGCCCTGTAATTAAGGTGAGCACAATAAACCCTAAGGCAGGACCCTAATAACCCATACCCCTTACGAATGAAG
GTTTCGGTCACCCCACCAGGTAAAGAATCATGACCAGCTGAGGTGCTTGCTGAGGGAAAAGGGGAATACAGAATGAGTAG
TAAAAGAAGGTAATTACAAATACCAGCTATGACCATATGACCAGTTATAGAAATAAGGACTATAATTGTGATGAGTATT
TTCTTATGAATGCATTTATATGTATATATACATATATTAAGCATATATCTTCATTTTCTTTTTCTTATTCCTTATATA
ACATAAGAGGTATTAACCTTATCTTCATTTTCTTTTTCTTATTCCCTTATATAACATAAGAGGTATTAACCTTTATATTAG
TATTTAAGTATTTATTTATATCATAGTATTTAAGTTATAGGCTATCAGGATAAGAGTAAACATTACTCAAAACCTTTA
CTTTCACCTCTGGGGAATGTGTTAGTGCTTTTAGTTGTATGATGCAGGATAGTTGTAGCTGTTTGGGTAGAATTTATGGCC
TTATGGAGATTAAATATGGTTAAAGGAGATGCTTATGGGTACCAGGTGACCAAGGGGCAGAAATTTGTAATGGTTAAATTT
TATGTGTGAGCTTGAAGTAGGCTAAGGGATGCCAGATAGCTGGTAAACACTAATTTTTGGGGTGCGTCTGTGAGAGTGTT
CCTGGAAGAGATTAGATTAGCATTTGAATTGGTAGACTGATTAAAGAAGATTGCCCTTACCATTGTTGGCAGGGATCAG
TCAATCCATTGAGGACCTCAAAGAGAAGAACAAAAACATTGGGGGAAGGGGCAAAATTTTGCTTTCTTCGGAGCCTGGAC

354/375

ATACATATTCTCCTGCCTCTAACATCAGGGTTCCTGGTTGATTCTCTGGCCTTTGGACTTGCTTTCTGGTTACACCTTT
GCAGACATGGGACTTCTTGGACTCCATAATTGCCTGAGCCAATTCCTATAATAAAATAAATGTGTCTTTTTCTCACATAC
ACACACACACTCATACATATGTCTATTCTATTTCTCTGGAGAACCATTGATTAATACAGAGAGAGAAAAGATTAGCACAG
ATGAAGTACATGTTCTCAGTTATGTGGTAGTACCTGCCACCCTTTCCCCCATTTTCATTAGCACTCAGAAGAGAGGGAC
ACAAAAGTGGTCTTCTCCTGCCTTCAGTAGTAGCATATGTTGGGCATAATTTAATTTATTCTTGATGATCCAGGGTAGTTG
TAACAAATGAGCACAATTGATCTATATATAATAAAATGATGGCTTTGAGTTTGTAAAGGTATGCATGGCCTCTCAATAA
AAAATAAAATACCTTACAAAGTTGTCTTTATAAAATGTGTGCCAGGCACTGAGTGGACTGTGTTGATTTCTGGTTTCATGTT
TAGTGTTCCTGCTCAGGTTTTCACCTCTATAAGGTACTTGTAAATCATAGTCAGTATAAGGTGAGGGCTCTAGAAAACCTG
CCTGGTTTTAAGTGTGCGCCCGCAGCACTTACTGGCTAGGTGATGTTGGCAAAGTTACCTACCTTCTCTGAGGTACATTT
TCTTCATTTGTACAGGATTATATGAGTATGTCTATGTAAATATTTATGTGTATAAAAGATGTCCCCAAGGGACATTTTC
TATCCCCCAGCCTATCCCAAGGACACAAAGACTTACTTCCACCTATATGGCTCCATGCCATCCATGAATGGAACATAG
CCTTAAATGTGATAACAACAGTATCTTCTAAAGAGTTATGAGGATTAATGAGATGATTACATAAAACCATTAA
CACAAATGGCACCTAAATCCTCTAAATGTTGTGCCCTTGCTGTATTCTGTGTTGTAAGTTTGAATAATTGAAG
TGCCTAGGGGAAGCCAGATAACCAACATATTAAATTAATAACCTTTAATATTTTGTAGGGGCTTAAGTCTCTAAGTAG
GTTGGGAGGGTTTGGGGAGGAACGATTAAAAGATTTGTAGAGATAAAGACAAAAAGGTAGAATGCGATACATGCTAAA
TGGGTGGTACAAAAGTAGTATAGAAGTTTACAGGAGAAAGTGGGCAGTTTCATCTGGTAATTAAGAAAGACTTGATGGAA
GAGGTAACTTATATTGGGCTTGAAGATGAAAGGGTTTCAACAAAAATGTTATATAAGCTAACCTCTTTGCCCTCTGTG
CTGTGCACTGTACCATCCTGACAGCAACTTCTGATCATTCCTGAACCTTCAAGGACTCTACTTACAAGTAATGGATTA
GTGTCTTTGATGAAAATCTGCTGAGGAGCTGCAGACTCCTACCTCCCAATTTAAATGTGACCATATGCCTTCAGTCCTA
AAGAAGAGTAGAAAAGTTAAATAACTTCTTGAGATTCAGTTTCTTAAATGTCTAACATTTGTTCAATTTAAAAATCAACAG
TCACCACCACTTCTCTGTAAACAGCATCTGAGATGGAAGAGGCTATGGAGGCCTGCCAGTCCACTAAGGCATCCTTTCT
GGCTTTTCTAGCCAATCTGGACTCTTTAAGTGTCTCAGGAGATAACCACTCTCCAAGACAGGCCTTGCCAGTATTCTTGGA
CATCTGCCCTACATGAAAGGCCCTACTTATATCCAGTAGAATCAGACTCTTTGTTGCACCTTCCATACAACAGATCAC
CCTTTTCTCTGAAGGAAGAGCTCATCATCTTATTCTTTTGCAGGGTCAACAGCCCTTAATTTCTTCCACTTCAGCTTCA
TATAAGCCAATTAGGGTTTTTTGTAAAGGCTAAGTCAATTTCTGTTAACACTGCTTGTCTACATGCATATTTCTTCTTAA
ACGAACTCTAATAATTATCCAGTATCTAATAATTATGCCTTCTTCAATATATGTTTGTATTTGATTCCACTGTAG
AAATACAATAATATGTGCTAAGAACCTATATAGTTTTAAATTTTTTCAATTTCTATATGCTTACCTATCTGTAGATAAAGG
TTCATAAAGGCATTTATAGACACTATAAAAGTTTACCAGAACTGCCCTTTTAAAGATAAAACACTATTGTTTTATCTAA
AGAAAACAAAAATAACAAAAAACTCTGTACAAACCTACTCCCTACTAGTCTAAACAGCTCTGCTCCTGTAGTTTGGG
AGCAGAAATTTAAGTGTGCAATTTGTATTTCTATAGTTCCGATAAAATAATAGAATTTCTCAGTTGAAAATGTCTTAA
GCCCTCCTCTCCTTCTAGCTCCATTAATAAGTACCATTTGAATAGTATTGGGTATTTCTTTCTTAAAAAAGATATATA
TTTCCAAATATATTTTCTATGCATTCGTTATATATTTTCTATGCATTCGTTAGAAAAAAGATCAAATACCTGTGCTTTT
AACCTTTTTCTTTTCTTTTCTTTTCTTTTCTTTTGAACAGAGTCTTGCTCTGTTGCCCTAGTTTGGAGTGCAGTGGCAGGATA
TAATGGCTCACTGCAGCCTTGAACCTCTGGGCTCAAGCAATCCTCCTACCTCAGCATCCCAAGTAGCTGGGACTACAGG
CACGCCCTACCATCCCAGATAATTTTTTATTATTTGTGCGAGATGAGGTCTCCCTATGTTGACCAGGCTGGTCTTGAAC
TCCTGGGCTTAAGCAATCCTCCTGCCTCGGATTTGCTTTTAGTCTTTACAGTGATTAAGTGGAAAAGAGAATAAAGCATC
AAAAGTTTTTAAATGATTATCTTGTAGCTCTGGGTCTGCTATTTACAAGAGTAGGAGAGAGGCAGAATCTCTCCCTGC
CTAAAATTCACAGGTCTAGGGCAGTAGGGAGAGAGTGGCAGAATCTTACCAGAGGGTATACAGACAGCCAAACACAAC
ATCATGTGTAAGCTGTGAGCAAGCAGGCAGGAAGCAATATCCCTGTACAGTATACAATGACTGCCACGATACTTGGGA
AAAGAAAATGGAATAAAGCTTGGACTTTTCAGAGCTATACATGAGCAAAATGAGCAAACTTAACTTGTTCAT
TATGATTCTTATTGTTCTTGTACCTCTTTGAGTACAAACAATCCTGTAAACAGGATCCTCACTTATATAGTGCAG
GGTAGGTAATTCACAGTTATCAGGAATACAAAACCTTATGCTCTGGATGTGTTATAGATACTAAGAATATGTCATATT
CTGCTGAGCTCATGGCAACTCTAGAGGAGAGGTTAAAGATCCAATTTCTTCACTTTAGAGAAAAGCTGAGACTTACAGAG
TGAAATGACCTGCCACATGTTAGTAGCATTAGAATTCACCTCCCAAGATTCATTCCAGTGTGTTCTCTGCTCTTATGTT
ATCTGATTTATTCTCTCCTGGATATTGTGAGGTAATGATAAGGGCAGCAGAGAAAGTTAGGGGAAATTACATCCTAAAT
CCAGAATTTTAAAGATCAGATAAACTTCTCACAACAGTTTTGCTGATCTTTGGCCTTTTGTCTTTTTTACAGACTCTG
AACTTGCCTTGATGTACAATGATTCTCAGTCTTAGAGAACCATCATTTGGCTGTGGGCTTTAAATTGCTTCAGGAAGA
AACTGTGACATTTTCCAGAATTTGACCAAAAAACAAAGACAATCTTTAAGGAAAATGGTCATTGACATCGTAAGTAGC
TGATAAAAGCCAAAGAAGAGAACTGTGATGCAAGTTGTTTATAATTTAGACATAAGAACAAGATGAGTATTAGGTAAAA
GGAAGTGCATTTCAAACATATTATGGCCCTTTATGTTATAGAAGCTGCCCGTGATGCTGGCTGTGATGTTCTGTAATA
GGTTTTTCACTTCTAGCAGTTTGGACTTGAGAATAATGTGAGCTCACCTCATCATTTATTTTCTGGGCCCCCTCCAGTC
TGGTGGCGGGCAGAGAAAAATGACTAACAAAAGCAGATTGTGTGGGCCACAGCTCAAATGGATTTTTTCCCCACCTTTT
CTCATCAGTAGACAGTGCCATTTAGACATCCATGACTTTACTCTTTTTTCTATGCATCTTATTTCAGTGATTATGAGACA
CAGGAAAATCTCTAGCTTTCAAAAACCTTATAAACTTGTGATGATGCTTATCCATGGAGATGTCACCCATTTTTTACCA
TGAAAGTGGTTGTGAGTGCCTAGCATTTCTGTATATTACACACATTTATCTGGGCTTTGGGAAAACCTTGATAGCAAAGG
GGAAAAGACTCTGCCCCCAAGGAGTAGTAAGGATTTTCCACTGTCAATTAAGGCATAGTGTGTTTTATTCTTTTTTCT
ATTCTTATATTCTGCGTAATATTTTCTATGTGTAAATCTGTTTTCTCTGAACCTAATAATACTCTATATTTAAGGT
ACTTGAACAGATATGTCAAACACATGAATCTACTGGCTGATTTGAAGACTATGGTTGAACTAAGAAAGTGACAAGC
TCTGGAGTTCTTCTTCTTGATAATTATCCGATAGGATTCAGGTAAAGCCTTGTTTGAAGTTTGTCTGTGTGTGTGTGT
CTGTGCACATGTGCACATGTCTGCGTGTTCAGCTTTGATAAGATGTATTTCTTCTCTCCACCTTATACTTTTCAGCA

355/375

ATTGTAGGCAGGATTTTTATCCAAATTTTATTCTGAGAATTAACCAGGTAAAATTCTACTGGTCTTTCTGTTTGCAT
 CTACATTAATTAACAAAACTAACAAACAAACACCCACAGAACCCAGCCACTTAAGCAGCTCTGAATCTAGTCAGCCATG
 CACATAAACAGTTCTCTTAAGCTATTTAGATGCAGTAGAAGTGGCATAATTTGGAACATTAATACAAGTGTGAACATA
 TACACAGACACATCTGGTTGAGCTGTTTGGAAATAAATTTGAACTACGTGTATTTTAAAGTGTGTCAGTCATCCAATG
 TGAATTTCTAGTTTTTTTTTTTTTTTTTTTTTAAAAAAAGGAAACAGGAGTGAATAGAGAATGCATCCATCTATTTTAGG
 TTCTTCAGAAATATGGTGCACGTGTGCAGATCTGAGCAACCCAAACAGCCCTCTCCAGCTGTACCCGAGTGGACGGACCG
 GATAATGGAGGAGTTCTTCGCCAAGGAGACCGAGAGAGGGAACGTGGCATGGAGATAAGCCCCATGTGTGACAAGCAC
 AATGCTTCCGTGGAAAAATCACAGGTAATGCATGAAGTGTATAGCTTTCAGAGAGAAACAGAGCTACCGCTTTAGCATTT
 GGTACTTTGTATTACATATGATAGTATTTTACTGGATTTTTTAAATTACTTTGTTTTTGACAAGCTCAATTTACCTT
 AGTATTTATGATCCAAAGAACTTTTCTTCTATGACTTACATTATATAGTCATATATATATTCTAAAGACATATTCAT
 TTATTATGACTATATTCATTTAATATATTCATATACATAGAGCACATGGCATTATTTTCACTTATCTGGATTACCTACA
 AATTGGTGATTGTAAAATAAGCCCTACCATGTCAACAACCTGGAAAATTTTTATGCTATAGAACATGCTCTTTAAACAA
 AGGTTCTAGAAGCTAATTTTGAACAGCTAGTAGCAATACTTTACTTTAAATGGTCTGTTGTTGTTGAAAATAGTGACAA
 TTTTACCAAATAAGTTTAGTAGTCTTCTGTTTCACTGTTTTTATTTGTTGGGCCATGATCTAATTAAGCTTTTCCATTGTT
 TCTTAGTCCCAAGTCTCTACTCATACTGGATTTTTTTCTTAACTAGGTGGGCTTCATAGACTATATTGTTTATCCCT
 CTGGGAGACATGGGCAGACCTCGTCCACCCTGACGCCAGGATATTTTGGACACTTTGGAGGACAATCGTGAATGGTAC
 CAGAGCACAAATCCCTCAGAGCCCCCTCTCCTGCACCTGATGACCCAGAGGAGGGCCGGCAGGGTCAAACCTGAGAAATTC
 AGTTTGAACCTAATTTAGAGGAAGATGGTGAGTCAGACACGGAAGGACAGTGGCAGTCAAGTGAAGAAGACACTAG
 CTGCAGTGACTCCAAGACTCTTTGTACTCAAGACTCAGAGTCTACTGAAATTTCCCTTGATGAACAGGTTGAAGAGGAG
 GCAGTAGGGGAAGAGAGGAAAGCCAGCCTGAAGCCTGTGTATAGATGATCGTTCTCCTGACACGTAACAGTGCAAAA
 ACTTTTATGCTTTTCTTTTAAAGTAGAAAAATGTTTCCAAAGTGCATGTACATGCCACAACCACGGTTCACACCT
 CACTGTCTGCTGCCAGGACGTTTGTGAACAAAACCTGACCTTGACTACTCAGTCCAGCGCTCAGGAATATCGTAACCAG
 TTTTTCACCTCCATGTCTATCCGAGCAAGGTGGACATCTTCACGAACAGCGTTTTTAAACAAGATTTTCACTTGGTAGAG
 TTGACAAAGCAGATAAAATCTACTCCAAATTTATTTTCAAGAGAGTGTGACTCATCAGGCAGCCCAAAAGTTTATTGGAC
 TTGGGGTTTCTATTTCTTTTATTTGTTTGGCAATATTTTTCAGAGAGAAAGGCATTGCACAGAGTGAATTAATGGACGAA
 GCAACAAATATGTCAAGAACAGGACATAGCACGAATCTGTTACCAGTAGGAGGAGGATGAGCCACAGAAATTCGATAAT
 TTTCTAATTTCAAGTCTTCTTGATACATGACTGAATAGTGTGGTTTCACTGAGCTGCACCTCTCATTTTGTATGA
 TATGTAAAAACAGATTTTTTGTAGAGCTTACTTTTATTTAATGTATTGAGGTATTATATTTAAAAAACTATGTTT
 AGAATTTCTATCTGCCACTGGTTATTTTTTCTAAGGAGTAACTTGCAAGTTTTCAGTACAAATCTGTGTACACTGGAT
 AAAAACTAATTTATGAATTTTACTTGCACCTTATAGTTTATAGCAATTAACCTGATTTGTAGTGATTCAATGTTTGT
 TATATACCAATGACTTCCATATTTTAAAGAGAAAAACAACCTTTATGTTGTCAGGAAACCTTTTTGTAGTCTTTATTA
 TTTACTTTGCATTTTGTCTTCTTCCAGATAAGCAGAGTTGCTCTTACCAGTGTTTTTCTTCTATGTGCAAGTGA
 CTATTTGTCTATAAATCTTTTATGTGTGTTATATCAAATGTGTCTTAAAGCTTCATGCAAACTCAGTCATCAGTTTCGT
 TTGTCTGAAGCAAGTGGGAGATATATAAATACCCAGTAGCTAAAATGGTTCAGTCTTTTTTAGATGTTTTCTTACTTAGT
 ATCTCCTAATAACGTTTTGCTGTGTCACTAGATGTTTCAATTTTCAAGTGCATGTCTTCTAATAATCCACACATTTTCAT
 GCTCTAATAATCCACACATTTTATGCTCATTTTTTATTGTTTTTACAGCCAGTTATAGTAAGAAAAAGGTTTTTCCCTT
 GTGCTGCTTTATAATTTAGCGTGTGTCTGAACCTTATCCATGTTTGTCTAGATGAGGTCTTGTCAAATATATCACTACCA
 TTGTCAACCGGTGAAAAGAAACAGGTAGTTAAGTTAGGGTTAATTCATTTCAACCAGGAGTTGTATATCATGACTAG
 CTTTACTCTTGGTTTACAGAGAAAAGTTAAACAGCCAACTAGGCAGTTTTTAAAGAAATTAACAAATATATTAACAAAC
 ACCAATAACCTAATCTTATTTGTTTAAATGATTTTACCATGGGATTAAGAACTATATCAGGAACATCCCTGAGAAAC
 GGTTTAAGTGTAGCACTACTCTTCTTAAATGGACAGCCACATAACGTGTAGGAAGTCTTTATCACTTATCTTCGAT
 CCATAAGCATATCTTGCAGAGGGAACCTCTTTTAAACACATGGAGGGAAGAGATGATGCCACTGGCACCAGAGG
 GTTAGTACTGTGATGCATCCTAAATATTTATTTATTTATTTTGGTAAATAAATAAAGATAGAGATCACTCTT
 GGCTGATTTTCAAGCAGGAACTGTATTACAGTTTTTATAGAGATTAATTTCTAGTGTTTTACCTGATTATAGCATTTGGCAT
 CATGGGGCATTTAATTTCTGACTTTATCCCCACGTCAGCCTTAATAAAGTCTTCTTTTACCTTCTCTATGAAGACTTTTAAA
 GCCCAATAATCATTTTTTACATTTGATATTCAAGAATTGAGATAGATAGAAGCCAAAAGTGGGTATCTGACAAGTGGAAA
 ATCAAACGTTTAAAGAAGATTACAACTCTGAAAAGCATTTATATGTGGAACCTTCTCAAGGAGCCTCTGGGGACTGGAA
 AGTAAGTCATCAGCCAGGCAAATGACTCATGCTGAAGAGAGTCCCCATTTCACTCCCTGAGATCTAGCTGATGCTTAG
 ATCCTTTGAAATAAAAAATTATGTCTTTATAACTCTGATCTTTTACATAAAGCAGAAGAGGAATCAACTAGTTAATTGCA
 AGGTTTCTACTCTGTTTCTCTGTAAAGATCAGATGGTAATCTTTCAAATAAGAAAAAATAAAGACGTATGTTTGACC
 AAGTAGTTTCAAGAATATTTGGGAACCTGTTTCTTTAATTTTATTTGTCCCTGAGTGAAGTCTAGAAAGAAAGGTA
 AAGAGTCTAGAGTTTATTTCTCTTTCCAAAACATTTCTCATTTCTCTCCTCCCTACACTTAGTATTTCCCCACAGAGTG
 CCTAGAATCTTAATAATGAATAAAATAAAAGCAGCAATATGTCAATTAACAAATCCAGACCTGAAAGGGTAAAGGGTTT
 ATAAGTGCATAATAAGAGAGGCTCTTTTTTTTTCTTCCAGTTTGTGGTTTTTAAATGGTACCGTGTGTAAAGATAC
 CCACTAATGGACAATCAAATTGCAGAAAAGGCTCAATATCCAAGAGACAGGGACTAATGCATGTACAATCTGCTTATC
 CTTGCCCTTCTCTCTTGGCAAAGTGTGCTTCAGAAAATATATACTGCTTTAAAAAAGAATAAAGAAATATCTTTTACAA
 GTGGCTTTACATTTCTTAAATGCCATAAGAAAATGCAATATCTGGGTACTGTATGGGGAAAAAATGTCCAAGTTTGT
 GTAAAACAGTGCAATTTTCACTTGAAGTTACTGAACACAATAATGCTGTGTTTTAATTTTGTGTTTTATATCAGTTAAAT
 CACAATAATGTAGATAGAACAATTAACAGACAAGGAAAGAAAAAATTTGAATGAAATGGATTTTACAGAAAGCTTTATG
 ATAATTTTGAATGCATTATTTATTTTTTGTGCCATGCATTTTTTTCTCACCAAATGACCTTACCTGTAATACAGTCT

356/375

TGTTTGTCTGTTTACAAACCATGTATTTTATTGCAATGTACATACTGTAATGTTAATTGTAAATTATCTGTTCTTATTAAACATCATGATCCCATGATGGGATGGTGTTGATATATTTTGGAAACTCTTGGTGAGAGAATGAATGGTGTGTATACATACTCTGTACATTTTTCTTTTTCTCCTGTAAATATAGTCTTGTACACCTTAGAGCTTGTTTATGGAAGATTCAAGAAAACATAAAAATCTTTAAAGATATATAAAATTTAAAAAAACATAGCTGCAGGTCTTTGGTCCCAGGGCTGTGCCTTAACTTTAACCAATATTTTCTTCTGTTTTTGCTGCATTTGAAAAGGTAACAGTGGAGCTAGGGCTGGGCATTTTACATCCAGGCTTTTAAATGATTAGAGATTCTGCCAATAGGTGGATTTTTACAAAACCAAGACAACCTCTGAAAGATTCTGAGACCCCTTTTGAGACAGAAGCTCTTAAGTACTTCTTGCCAGGGAGCAGCACTGCATGTGTGATGGTTGTTTGCCATCTGTGTGATCAGGAACTACTTFCAGCTACTTGCATTTGATTATTTCTTTTTTTTTTTTTTTTTTTTTTAACTCGGAAACACAACCTGGGGAAATATATTCTTTCCCAGTGATTATAAACAATCTTTTTCTTTTTTTTTTAAAGTCCTTTTTGCTTCTAGAGCTCATAGGAAAATGGACTTGATTTGAAATTGGAGCCAGAGTTTACTCGTGTGGTTATCTATTCCATCAGCTTCCCTGACATGTTAAGAGAAATACATTAAAGAGAAAAATACTGTTTTTTAATCCTAAAAATTTTCTTCCACTAAGATAAAACCAAATGTCCTTACATATATGTAAACCCATCTATTTAAACGCAAAGGTGGGTGATGTCAGTTTACATAGCAGAAAGCATTCACATATCCCTTAAGATTTGTTTCTGCAAAACCTTTCATTGCTTTAGAATTTTAAAAATTTCACTTGTACAAATGGCCAGCCCCATAAGCAGGAAACATTTATAATGGATTATATGGAAACATCCTCCCAGTACTTGCCAGCCCTTGAATCATGTGGCTTTTTCAGTGAAAGGAAAGATTCTTTTTCTAGGAAAAATGAGCCTATTTTTTTTTTATTTTATTTTATTTTTTTTGACACAACTGTAGATTTTAGCAGCCCTGGCCCAAAGGAATTTGATTACTTTTGTAAAAACAGTACAAAGGGGACACTATAATTACAAAAACATCCTTAACTGATTGTAGTTGTTTTATTTTATTTTGGATATATTTTCAGAGTGGTAAATGTGTGTGAGAAATTACAAATGATTATTTCTTTTAGTGGTTTCTTAGCCCTCTTTACAGCCCAACGGGATAGTACTGTACATCAATACCTTCATATGAAATTTTTTATATGCAATGAAAAATAAAGCATGGGTTGATTCTGCCATTTTATGACTCAATCTTTTACAAATAAAAGATTATTCATTTTTAAATTTATAGTTCAATCAGCATGTCTCTTAGGATACTGAACGTGGTTGAAATGAAAGGATAGTGACATCAAAAGTTAGTACTGATATTCATAACCAAATAAAGCCAACTTGAGTAAATTTTGCTACATTTAAAAATTTACCAAATTTACTTAGATGGCCTATAAGATTAAGCATGGTGTTTTTCTAAGCAAGCTTTGAAATGGGCCCTTCCATACTTACTTTAAATTGAATATTTCTGGGATATTGAAAATTTATTCAGATACTTGACAAATATTTTTTGGTTACCTACTCCGCAAACCTACAAAGTTTAAAGGACTCAACAATAAGTTAATGAGACACAGTGTGTGCTTTTCATGGAGCTTACAGTCTGGAGGGGACAAAGGCTTAAACAATACTCATATAATTATATATGTGATCAGTACAATGAAGGAGCTCAGTGGGGTAAATAAGCAGGAACCTGAACCTTGATCTGTTCCGGAGGGCCACAGAAGGCTTCCCTGAGGCYTTGAGAAAGTGAATTCGATCTGAGTTCTGAAGGATTGTAAGAGGTAACTAGGGAAAAGTTTGACAGGAAGAGGAAGGGGATCCAGACAAAGAAACATTTGCAAAGATCTTGAGGCATAAATGAGCTTGAGACATCTGGAGAAACTGAGGAAAAGTGAGAGAGTAGGCAGGGCCTGGAGCCGAGAGCCATTGCTAACCATCCTGTGTGAGATATCCCCAATTCTGTAGCTTTATTCTCATAACCCCTGCTCAATTTTCTTTATAACACTTCTCACAGATTTATATACGTGTTTTGTTTTGTTATCTGTCTCTCCACCAGACCACAGCTCCATGAGAGCAAGGTCTTTGCTTACCAATATATCACTAGCACTTAAAACTATGCTTGGTACACAGTAGGTTCTTAATATGTGTTGAAATATAGCCATCAAATTGATATTGGATATAAATCAATCTGATAAGATATTTTGAGATATTAAAGAGTTTTTAACTTGATACATAAAAACTTTGTTTGTTTTGTTTTGTTTTGTTTTGAGCTTACTAAGATCCTGGATAAAGAGTTTAGAGTTTCTATCTCTTTGCTAACTAAAACTCTGTTTTGCTTATTCCTCACAAATTTCTACTTTTTTTCTAAATGACAATCCATTTGTGTCATGATAATGAGAGTAAAGAAATCAGCACAAATTTAATCCCCAGATCATCCCCAGACCATCCAGCAGAAATAAGGGTAAATTAACAGAGCATCTATGCTTAGCCTCTCCACCATTCTCTGCCCACAACAGTCCGACGCCAACAGGTGCCAAATTTGTGCTTCTCCGGGAATAACTGTTTTAAACTCAAGCTCCCCTCCCCAAAGCCATGACCCCAAAGTGACACTATGGAACTAAGGAAGCAACTCCCTCTTTTTCTGACTTGGCCAGCCTTGCTGATTTTAGGCTAATTTGGGTGTTGGTGGGCTGAACTCACATTTAAAAATCTCTGACCTGGAAACCTTTCTCAGGCACACGGCTTTGGACCCACAACAGCAACATTTCCACCACAAAAACAAACCACAAACCAAAACATTCCCTGTTGCTAGAGAGTACCACCTGTCTACCAAGGGGAAAAACAACCTTGTGTGTCAGGGGAATCATACCAGGGCTTTCCCATCCTTCTGATTTGGGTCTGTCATCCACCAGCTACTCCGAGAGCTCCAAATACTCTAGGTCAAACCTCAGTGTATGGGTATAAATCTTGAATTTGTACACATAGGAAATACTACTTTATTTCTTTTAAATCAATTAATCTGGACTCGGGCTCCAGCCAATCACACTATTGGAAATTTCCATCTCTCATTACTGCCACAGCTCCTCTCTCTCCCAACATAAAATTTATCTTATCTCCAATATAATCTGAGTATCAGGCCTCTGTGTTGTTCCAGCAGAGGTTCCCTTACAGTCCCTCAGCTATTAGCTTCTGGTTCACATGTGGTGTACCAGGAATATATGCTGGTTTGGGGCCCTGCTTCCACACAGTGTGTGCAATCAAAGAGCCTATCCTTCTGGTGTTTTATTACACCTTGCTGTGGTCTGAATGTCTGTGTTGAAATGCTAACCCCTAGGTGATGCTATTAGGAGATGGGGGCCCTTTGGGAGATAATTAGGTTATGAAGGCAGAGTCCCTCATGAATGGGATCAGCGCCCTTATAAAAGAGGCCAAAGGGACCTTGTTCAACCTGGCCACCATGTGAGGACTCAGCTAGAAGGTGCCATCTGTGAAAAATGAAAGCAGGTCCTCACCAGGCACCAAATCTGCCAGAACCTTGATGTTGGACTTCCCAGCCTCTAGACTGTGAGAAGTAAGTGTGTTGTTTTAAGCCACCCACTTTATGGTATTTTTCTTATAGAAGTCTAAGGAGACTAAGACATAACCTACTGAAATTACTACAAAAAAAGCAGTTCTCTTCTTTTCTTAATTTCTCAACATATTCTCCTTCTTCTCTCTCCTTCTTTTGGTCTCTCCAATGAGATCAGGCTTAAACCAAAAAACGAAACAGACTAGAGGTAGTTCTGACTTCCATTTGCTTCTGCTCTCCACTCTGCAAAAACCTTGGCTATTTTGAATATGGAGACGAAAAAAGATATTGGAAGAGCATACATTAAATAATAGTCCATTAACTTCCACATGGTTGGCAACATCTAGATCCAACAATGTTCACTGAACATTTTGAGATGTGGGAAGTTGAGGAAGTTGTCTTCCAGAAGGAGTCATCAGGAACTCCCATACTTCTATGTGGGAACACAGGAAAGAGGCATTTTTCTCTGAAGTCTCTGTGTTCCAGTGTGCTATTTTGACGACTATGAAAAGTTTATATAAGTGTGCTGCAAGCCCCACCTGCCATTCCAGGACCTGCTATGGTCCACAATTGGCATTATGATTCCCTCTAATTTTGACGCTATGAAAAGTGAGGCCAAGAAGGTTAATTGACTTGGCTAAGATTATTCACAGGCTAATAACTGAGATTAAATGATTGATTGCAAACTACAGATTTGACAGAAGTCCCTAATGCTATCTCTACATCCTATTTCTGTTGAGGACCAAATTTGACTGTTGCAATTGCCTTTGATTTCTTTTGACCATCCTTCAATACAGATTTTCAGTAAATTTTTATGGTCCAAAGCTAGGTGACAGATATTACATCATATGCATTTGTAACTCACCTATGCTGTCATAGCCTTGCTATATGGTCAGAAAT

Fig. 6.35

357/375

CTCCAGATTGACTGGGGAACTTGGAGTTAAAGAGCCCCCTGACCCCTAAAAAATTATAGAAAATGAAAGAAGCTGTCAA
GAAAGTAAGGAGCAGAGATAAGAGCAGAGATGGGAGYGTGCTCTGCCCCGAGAGACTCACAAATGAGGCAAGACAG
ATCTTAGCTGAACCTTCTTGACAGGATGTATGCCTCAATGAAAGGAATGGAGCACGGGCAGCATCCGGCTTAGGCTGGAGC
CCCTTCAACCATCATGGCTGTTTTAGCAGGGTGTGGCCAGCTGCTTACAAATCCCAAGCCAACAGACATGGTTTTAGG
ACCTGAATCATGCAACATATTTTCTGAAAGGTTCTATCACCTGAGAATTGCTTTTCTCTCGCTCCTTGTTTTTGAACC
AAAAAGCCGACCAAATGTATAGTGGCAAACTTGTCTCAGCACCCATCCATGCAAGGCACTGTTTTACCACCAGGCTGC
ATCAGTTAGAGAACCAAGCCGTCTCTCACCTTGACGCTTCTTCACTTTGCTCATTTTCTCTCTAACACTGATGGTTT
CTGTTTCTGCTATTACAGTACAGCATCTGGGAAGAGAGTGGCAGAGAACGCCAGGCAACTGCACCCTGCCACAGTGGG
TCAAGCGGAGGCTGGGTGGTGACACCCGTCTCTACCCAGCAGAACTCAGTGGTTTCATGGGTGGAGAACAAGCTCAGGA
CAGCTGCTGCAGTCCAGGGAAGTGTCCACCATAGAAGACTCTTGGGAAGCAGCCCTGACCCCAACCCCTGTGCTTTT
TGAAGCCGTGTCTGGTATCAGATGGAATTATGCAAGTATCTTGGAAAGTGTGAAAACAAAGCAAGGTGAGAGAAAACAATTGAGG
CTGAGATCAGCGATTAAAAATATCTAATAAATGGACTGGAAAGTTGAAAACAAGCAAGGTGAGAGAAAACAATTGAGG
AAAAGTGGGAGAAAGTGAAGGAAGTTGGACCTTTGTACTACAGCATCCAAGGACAGTGATGATATCTTCTGTTCCCA
CAGGACCCAGGTTCTTGGGTGCTTAACTAACACATAAGGCCCTTAAGGATCTAATCAAATAAATCATCCCCAACTCC
TCCCATCAACCCACATAGATATCCCTGTGCTCAGCTAAATGCTGCCCTTACACCTTGCCCTTACATCTCTGCTGCTG
GAAAACAGCTCATCCCTCTTGATCCAGTTTAAATACACCTTTGTCTGGAAAGCCTTTCCATTAGTATTTTATACACAA
CCCTATAATAAATATTTCCCTTAATATGTTGTATTTTTTAAAAAATTCTTTCTCTCACTAGATTGTGAGATTTTTAAT
TTTTATTTTTTTAGACAGTCTCACTCTGTCCCTAGGCTGAAATACAGTGGCGCAATGTTGGCTCACTGCAATCTCTGC
CTCTGAGTTCAAGTGATTCTCTGCTCAGCTCCTGAGTAGCTGGGATTACAGGCATGCATCACCACGTCCAGCTAA
TTTTGTAAATTTTTTAGTAGAGATGGGTTTCGCTATGTTGGCCAGGCTGGTCTCGAATCCTGACCTCAGGTGATCCGC
CCACCTTGGCTTACCAAAGTGCTAGGATTACAGGCGTGAGCSACCACGCCTGGCTTAGATAGTGCAATTTTTAAACATC
AATGTATCTCTTTTTGCTGCTAGTAAGGAATTAAGTCCGGATATTAACATTTGACTATTCTTTCCCTCTAACACCAA
CTCTTCTCAAAATGTGGTCTTGAGCTGACATTAACGTCAACTAGGATCTTGTAGATTATAATCTAGCCCCAGACCAA
GGCTCCAGGAAAAGACTCTCTAGGGGTGGACCTTAGAACCTGTGTTTTAACAAGGACTCCAGGTGATAAGTATGCTCCA
TAAAGTTTGAGAAAACACTGTTCAAGACATCATGGAGGTGTTTTCTATTTCTGTTTTTTTAAAGAACAAAGTTAATAAT
CTCAACCACCTTCTAATGTATTTTCAATTAATCAAAGGGATACTTGTGCTACAGGAGTTACAACAGATGACCTAGTGA
GGGCCACAGGCAGTCTGAGGAACAGTAGGATCCCATGTTTGGCCAAATGTCTATCAAGCAAGAAAGGAATAGTGAAGCCA
GCTATTAGCTCCCTTTCAGCAGAGGAAACCTGGGATTAGGAGTCCCATCAGGCATCATGGCATCACAAGCAGGCATGGG
TTAAGATTTAAATGTTGCAAAAAGAGAGAAGAACCAGAGAAATTACGTCCACATTATCCCTGCAAGACCATTAAATG
TAATGAACAGAAATCAAACACCTTTTCACTCTTCAAGTGCCGATTACAGGTTCACTCTGCTAATCACACAGCTGAGTGG
CCCTCTGCTTTTCACTAGGTTGAAACCAACATCCACCCCAAGATGGCTTGGGATCTACCATCACAAGGGGCCACCA
AAGGGCCAAATAACACAACCCCGAAATTCACTGGTGGTAACTCTCCATGGGGTTAACTTTGATTACTGGGAACTAGAA
ATGGGAAGGAGCCAGTAAATTAATTTCTTCTCTCCAAGACTATTCTGAGGCATAGCCTCCCCCTTGAAGCCCATCAGG
ATGATCCTGCAGTTCCATGTGAGCAAGAGCGCCCTACCAAGTGACCTGCAGTGTCTCTTGGCTGCTCCTTGTGAGTCAG
TAGCCAGCAGAGAAATGTTTTCCCTACTTTCTTTATTTCTTTGTTCTTACTTGCTTTCATTTTGCCCTTGACCTTTTTTT
CCTCACCCCTACTACCCAAAGGCATGTACTTCCCAATAAAGTCTGTCACTCTGATCCCTCCCTCAGACTGTTTCCAGG
GATGCTGAGCACCTGTACATTACAGAAAAGCAGATGTCAAATTTCTGTATATATATTGGAGTGCACTAAGTATTTAAAA
TCAACCTTTGGCTATTAGAGGTAGGGACTGTGCCTTATGCATCATTGTTTTTCCAGGGCTTAGTTAGTGTCTGCCATA
TAGCAAGTATTCAATTAACAGGAAAAGAGAAAAGACAAGTGGGTAAGTAATTGCCTGAATGAATGAGGTGATGGTGAAG
AATGGGTGGGAAGGGCATGAATTGGCTTAGAATAGATTAGACATTAAGTAAGCAGGAGTCGAGACAGTTAAGGGGCCAA
AGGCAGCTGAAAAGAATATGGAACAGGAATACAAGTTGAAGGAATCAGGCATTCTCCCTAGAAAACAAGGGTACGGGAA
GGGTAAGAGACAGACACTTCACTGTCTGGGAATTTTATCCATACTCGTTATTAAAGACACACTTGGTTGCCTACTTAA
TTATTACCAACCTTCCACCCCACTTTATTTCTGGCATACATAAGTGGGATTTTGTTCAGGTCTGTGGAAGTCAAGTCT
TCCAGGGAGATCCAGCCTCTCCTCAGTTCTGTAGGCTAATCTGAGCCTTTTATGGTAATTTCTCTACCCCTTGCCAGTG
ATTAGGTTAGGACAGGCTTGCCGTGCTGCAATAGTAGACAGTGAGACACAGGTTGACTTCTGGGAAAATATCCCCAACT
CTTACAAAGAAAAGAGAGAAACAGAACATTTTTCTTCGGGGCTTTGGAAATTATTTTCAAAGATGTGATGGTTAGGCTA
TTATCTTGAGGCCACGAAAGGAATATCTGAATACACAGACAACATACTGAAAATGGCAAAGCAGAAAGTTAGATAGCAC
ATGAGTCTTTGAAGATGTGTTGAGCTGCTGAACTAATCAGCCCTACTTTGAACTTATTAAGATAATAACTAGTTATTT
ATTTAAGCCATTTAGTTGAACCTGCTATTTATTTGCCCTGAAAACAATCCTAACTAATACTGTTAGTCCATTTGTAT
CGTTATAAAGGAATACCTTGATGCTGGGTAATTTATAAAGAAAGGAGGTTTATTTGGCTCAGAGTTCTTCCAGGCTGTACA
GGAAGCATGCACGGCTCTACAGCTGCCGTGCTTCTGGTGAGGCTCAGGAAGCTTTAACTCATGGCAGAAACAAGGGGA
TGTGGCGTATCACATAGTGGGAGGAGGTGGCAAGTAGGCAGGGAGGAGGTGCCATGCTGTTAAACAACCAGCTCCTTCA
TGAATAGAGTGAAAACCTTATACATTACTGCAAGGACAGCACCAAGTGGATCATGAAGGATCGTGACCCAAACACTTCCC
AATAGGCCCCACCTTGAATATTGGGGGATCAATTTCAACATGAGACTTGGAGAATACAAATATCCAACTATATCATAC
ACCCACTCTTTGTTCCAACAATGTGCTGGTGAGTCTGGGCTGGGARTGGGGGAGAAAGGTACCTGGCAGTGGAAATG
TTGGAAATTTGACCCCAAATTAGCTGGGTGACCTTAGGCATGTTAATTCATCTCTACTTTCTTTTCAATTTTAAATAGGGG
AATTATAATATTGGAATCTTCTCTACATTCTTACAGTATTAGAGCAAATGAATTTATAAATGTAAACTCAGTGTAAC
TTTAGATAAAATTTTTCAAACACTAAGCTTGTGACCCAGAGTAGATAATAAAGTCAAAGATGGTTGCCATGAGCACTA
ACCGTGAATTTAAATAGAATAGAGAATATCACTGTGTGCTGCACATAAGTTTCATTTTCTGAAATTGCTTCATTTTACAT
GCATGCATGGGTGCACCTTGTGTGCTTGCACACACATGCAATGTTGCCAAGTAAACTATTTTTTAAAGCATACGAAGCA

358/375

TGGATTTAGAACAAAGTCAACACCAGAGACAACTAGAGGAACCTAAGTCTCTACCAACCCCCACCCCTGCCAATTTAC
 CTGTCATCCATGATTCAAAAATGGTTTCTAAAGGGAAATAAAAATTGATTCAAAAGGGAGACCTAATGAGTAACATAAT
 AGGGAGCCATTGATTGTTTTAGAGTGGTATGACGGAGCAGTGGGTAAAGTAGATCACTCAACACTGGTATTTTTCAGACTGC
 CAAGAGAGGAGAAAACAGACACAAAGTGATTTCTGGGCTTTTGACAACCTTTTTTTTCTCAAAGTAGATTGACAATATT
 ATGTGTCATCTTATATATATTAATAGACAAAGGCAATATCTACACTGGGAATACTTCATGGAAGGCTTGGCTGGAAAC
 TAAAAACTGGACTATAAACTTCTTGGGGGTTAGATACGTATCTTAAGACTTCCCTTGTGTCTTGAATTGTGCCCTAGCCTA
 GTGCTGCATAGATATGTAAGCCACTCATTCTTGTGCAATTACCTATTGTAGAATTTTCAGACTAATATATTTCCCTTTTC
 CTTGTTTTGATCCTCTGCTGAATCATGAGAATAGTTCTCAGGTGAACAGCAGTGATGTACAGTGTCTCACTGGAAAAGC
 AGGAAAATAATCAGATGTACCCAGAACCTTAGGATATGGGAGGCTCTTCTACTGGCCACTCCATGGGAAACTCGCTTG
 CTTTGGGGGACAGTTTGCTTTGCTCTATTTTGTGGGCACAGGGTTTTGCCTTATTTTTCTACTCCCTTATTCCCAGCAA
 ACATCCTAAAAAGATGTGGGTAAAAGAAAAAGAGAATAAATTTTGCAATTCTACTCACTGGCTAGAAACAGACAGAGAC
 ACATGAGTAGAGGCGGAGTTTACCATCACCTTAATCATCTGGGGCCCATGTGTGTATAAAAGGCAAGAAAAGAGCCA
 TTACCAGGAGGCACCTTACAGTTTCCACCGCATAATTCCACCCCTCTGTATCAAACACCCAAATTGCTACACC
 AATCACAACGTGCCCTCTTGTTCAAAGAAAAATAATATCATGGATTTCTTCTGGCAGTCTGTCTATTGATTGTTTTGT
 TCTTTTAATAAGCAAGGTGAGAAGGTTAGAAAAAAATTATTAGATAATTACCTGGGAGTAGGGTAGGAACCTTGAGGC
 ATGCAGAGAGAATGGCAAATTCAAAATCAACTAAGCCATAACTGCCTATCTACTGACCACCTGTGCCAGGTACCTCAAA
 AGAGTAGGACTTGATTCTTCTTTTGGAGAGGTTTCAGTTTGGTTGGAAAGGAATGGGGGAGGGGCCAAGTACAGTGGC
 TCACACCTGTAATAGCAGCACTTTGGGAGGCCGAGGTGGGTGAATTGCTTGAGCCAGGCATTTGAAACCAGCCTGGGC
 AACATGGCAAGACCCCATCTACAAAAAATACAAAAATTAGCTAAGCATGATGGTGTGCACCTGTAGTCCCAGCTACT
 CGGGAGGATGAGGTGGGAGAATCACTTGAGCCAGGAGGTTGAGGCTACAGTGAGCTGTGAACATGCTTCTGTGCTCCA
 GTCTGGACTACAGAGCAAGACTCTGCCTCAGATAATAAAAAAATAAAAAAGGAAAAAAAAAAAAAGAAATGGGGAAATGGA
 AGAGGAAGGAATCCAGGGGAAGAATGATCACTAAGACTGCATCACACCTTTTGCTATCTCATTTCACTCTACATCAAC
 CCAATATTCCCTTCATTTAACAGAGAGGTCAAAGAGGCTGGAAGGATAAGGTTGTCCAGTAAAAATGTCAAGGCTGAT
 ATGGGAACATAGCCAGTTTGTCTCTAAAGTGCCTGTGTCCCTTGGGGAAGAGAATATTTAACTTGATTGTGCTTCAG
 TTTTTTATTCTATGTCTAGCTATCAGTTTGAAGGCATTATTTAGGGGATTTCTTTTACTTTCTTTTTTTTTTAAATCTCA
 AATTTGCCCTCTCATTTAGTAACGTATTTTCAGTGCCTAACATGTAGGACAAAAATACTTTCCATATTTTTTTTTTCAAAA
 TTTTTGCACTGACTGTAGTCCCCTCACTGGAACAGCTTTATTTCCCTAAATAATATACAATGAACCTGTTCATATCGAA
 GACGTATGCCAATATTAAATACAAACAGCTCAGCTGGGCGTGGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGACT
 GAGGCAGGTGGATCACCTGAGGTGAGGAGTTCAAGACCAGCCTGGCTAACATGGAGAAACCTGTCTCTAATAAAAAATA
 CAAAAATTACCCAGGTGTGGTGGCACATGCCTGTAATCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCACTTGAACC
 CAGGAGGTGGAGGCTGCAGTGATCCGAGATTGTGCCACTGCCTCCAGCCTGGGTGACAGAGCAAGACTCTATCTCAAA
 AAAAAAAAAAAAAAAAAAAGGTGGCTGACCAGATGGCCAAAAGGAACAGCTCCAGTCTGCAGCTCCCAGCAAGATCA
 ATGCAAAAGGTGGGTGATTTTTCATTTTCAACTGAGGTACCCAGCTTATCTCATTGGGACTGGTTAGACAGTGGGTGC
 AGCGCATGGAGGGCGAGCCGAAGGAGGGTGGGCCATTGCCTCACCCAGGAAGTGCAAGGGGTCAAGGAATTCCCTCCCC
 TAGCCAAGGGAAGCCATGTGGGACTGTGCCTTGAAGAAACAGTRCACTTCGGCCAGACTACACTTTTCCCACAGTCTTC
 GCAACCCACAGACCAGGAAGTTCCCTTGGGTGACTATGCCACCAGGGCCCTGGGTATCAAGCACAAAACCTGGGCAGCTG
 TTTGGGCAGACACCAAGCTAGCTGCAAGAGTATTTTTCATACCCAGTGGCACCTGGAATGCCAGCGAGACAGAACAGT
 TCATTTCCCTGGAAAGGGGGCTGAAGCCAGGGATCCAAGTGGTCTAGCTCAGCGGACCCCAACCCACAGAGCCAGCA
 AGCTAAGATTCACTGGCTTGAAATTTCTCACTGCCACCACAGCAGTCTGAAGTCAACCTGGGGCACTCGGGCTTGGTGGG
 GGGAGGGGTGTCTGCCATTACTGAAGCTTGAGTAGACTGTTTTCCCTCACAGTGTAAACAAAGCCAAGGGGAAGTTCC
 AACTTGGTGGATCCCTCCGAGCTCAGCAAAGCCATTGAAGCCAGACTGCTCTCTAGATTGCTCTCTCTGAGCAGGA
 CATCTCTGAAAAAAAAGGCAGCAGCCCCAGTCAGGAGCTATAGATAAAAAACCCCACTCTCCCTGGGACAGACACCCA
 GGGGAAGCAGCGGTGGGCAGCACTTCAGCAGACTTAAACATCCCTGCCTGCTGGTCTGAAGAGAGCAGCAGATCTCCC
 AGGACACCGTTCAAGCTCTGTCTAAGGCTCAGACTGCCTCCTCAAGTGGGTCCCTAACCCCCATTGTAGCCTGACTGGGA
 GACACACCCAGCAAGGGTTGACAGACACCTCATAGAGGAGACCTCTCGCTGGCATCTGGCGGGTGACCTCAGGGACA
 AAGCTTCCAGAGGAAGGAGCAGGCAGCAATTTTTGCTGTTCTGCAGCCTCCGCTGGTGATATAGGTAAACAGGGTCTGG
 AGTGGGCTCCAGCAAACTCCAGCAGACCTGCAGAAGAGGGGCTGACTGTTAGAAGCAAACTAACAAACAGAAAGGA
 ACAGCAATGACATCAACCAAAAGGATGTCCACACAAAACTCCATTGGAAGCTTACCAACATCAAAGACCCAAGGTAGA
 TAAATCCATGAAGATGAGAAAAAATCAATGCACAAAGGCTGAAAAATCCAAAAACCAGAATGCCTCTTCTCCTCCAAA
 GGAACAGAACTCCTCAACAGCAAGGGAACAAAACTGGATGGAGAATGAGTTTGACGAATTGATAGAAGTAGGCTTTAGA
 AGGTGGGTAAATAACAACTCCTCTGAGCTAAAGGAGCATGTTCTAACCCAAATGCAAGGAAGCCAAGAACGTTGAAAAAA
 GGTTAGATGAATTGCTAACTGGAATAACCACTTTAAAGAAGAACATAAATGACCTGATGGAGCTGAAAAACACAGCATG
 GGAACCTTTGTGAAGCATATGCAAGTATCAATAGCCAAATAGATCAAACCAAGAAAGGATATCAGAGATTGAAGATCAA
 CTTACTGAAATAAAGCATGAAGACAAGATTAGAGAAAAAAGAAAGGAAGGAACAAAGCCTCCAAGAAATATGAGACTA
 TGCGAAAAGAACAACCTACATTTGACTGGTGTACCTAAAAAGTGATGGGGAGAAATGGAAACCAAAAGTTGGAAAACACTC
 TTCAGGATATTTATCCAAGAGAACTTCCACAACCTAGCAAGTCAAGCCAACTTCAAAATTCAGGAAATTCAGAGAACACC
 ACAAAAGATACTCCTTGAGAAGAGCAACCTAAGACACATAATCGTCACATTCACCAATGTTGAAATGAAGAAAAAATG
 TTAAGGGCAACCAGAGAGAAAGGTTAGGTTACCCACAAAGGAAAGCCCATCAGACTAACAGTGGATCTCTCTGCAGAAA
 CCCTACAAGACAGAAAGAGTGGGGGCCAATATTCAACTTCTTAAAGAAAAGAAATTTCAACCCAGAAATTCATATCC
 AGCCAAACTAAGCTTCAAAAGTGAAGAAGAAATAAAATCCTTTACAGACAAGCAATGCTGAGAGATTTTGTACCACC

359/375

AGGCTTGCCCTTACAAGAGCTCCTAAAGGAAGCACTAAACATGGAAAGGAAAAACCAGTACCAGCCACTGCAAAAACATA
CCAAATTGTAAAGACCATCAACACTATGAAGAACTGCATCAACAGGCCAAAATAACCAGCTAGCATCATAATGACAGAA
TCAAATTCACACATAACAATATTAACCTTACATGTAAATGGACTAAATGCCCAATTAAAGAAACAGACTGGCAAATT
AGATAGAGTCAAGAAGCAACGGTGTGCTGTATTTCAGGAGACCGATCTCAGTGCAGAGACACACATAGACTCAAATAA
AGGATTGGAGGAATATTTACCAAGTAAATGGAAAGCAAAAAAGCGGGTTGCAATCCTAATATCTGATAAAACAGAC
TTTAAACCAACAAAGATCAAAAAAGACAAAGAAGGGCTTTACATAATGGTAAAGGGATTGATGCAACAAAAAGAGCTAA
CTATGCTAACTCTCCTAAATATATATGCACCCAATACAGGACCACCAGATTCAAAGGCAAGTTATTAGAGACCCACA
AAGAGACTTCAACTCCCATAACAATAATAGTGGGAGACTTTAACGACCCACTGTCAATATTAGACAGATCAATGGGACAG
AAAATTAATAAGGATATTTCAGGACTTGAACCTCAGTTCTGGACCAAGCAGACCTAATAGACATCTACAGAACTCTCCACC
CCAAATTTCATAGAAATATACATTCTTCTCAGCACCACATCACACTTATYCTAAAATTGACCAACAGAATTGGAAGTAAAA
TACTCCTCAGCAAATGCAAAAGAATGGAAATCATAACAAACAGTATCTCAAACCACAGTGCATCAAATTAGAACTCAGG
ATTAAGAAACTGACCCAAAACCTGCACAACCTACATGGAAATTGAACAACCTACTCTGAATGACTACTGGGTAAATAATA
AAATTAAGGCAGAAAATAAGTTCTTTGAAACCAATGAGAACAAGGCACAACATACCAGAATCTCTGGTACATACCCAA
AATAGTGTTTAAAGGGAAATTTATAGCACTGAATGGCCACAAGAGAAAGCAGGAAAGATCTAAATCGACACCCTAACA
TCACAATGAAAAGAACTAGAGAAGCGAGAGCAAACACATTCAAAGCTAACAGAAGACAAGAAATAACTAAGATCAGAG
CAGAACTGAAGTAAACGGGAGACAGAAAAATCCTTCAAAAAAATAATCAATGAACCCACGAGCTGGTTTTTTGAAAA
GATCAACAAAATAGACCACTAGCCAGACTAATAAAGAAGAAAACAGAGAAGAATCAAATAGACACAATAAAAAATGATA
AAGGGGATATCACCACCTGGTCCCACAGAAATATAAACTACCATCAGAGAATACTATAAACACCTCTCTGCAATAAATT
AGAAAATCTAAAAGAAATGGATAAATTCCTGGACACATACATACACCTCTCCAAATCTAAATCAGGAAGAAGTTGAATC
CCTGAAGAGACCAATAACAAGTTCTGAAATTGAGACAGCAATTAATAGCCTACCAACCAGAAAAAGTCCAGGACCAAAAC
AGATTCAACACAGAATTTCTACTTGAGGTACAAAGAGCTGGTACCATTCTTCTGAAACTATTCCAAACAATAGAAAAAG
AGGGACTCCTTACCTAACTCAATTTATGAGGCCAGCATCTTCTGATACCACAACCTGGCAGAGACACACACACACAC
AAAAGAAAATTTTCAGGCCAATATCCCTGGTGAACATTGATGCGAAAATCCTCAATAAAATACTGGCAAAACCAATCCAG
CAGCACATCAAAAACCTTATCCACCATGATCAAGTAGGCTTCATCTCTGGGATGCAAGGCTAGTTCAACATATGCAAAAT
CAATAAACATAATCCATCATATAAACAGAACCAATGCACAAAACCGCATGATTATCTCAACAGATGCAGAAAAAGCCTT
CGATAAAATTCACACCCCTTCACGCTAAAAACTCTCAATAAACTAGGTATTGATGGAAGGTATCTCAAAATAATAAGA
GCTATTTATGACAAACCCACAGCCAATGTCTACTGAATGGGCAAAAGCTGGAAGCTTTCCCTTTGAAAACAGAACAA
GACAAGGATACCCCTCTCTCTATTCTTATTCAACACAGTATTGGAAGTTCTGGCCAGGGCAATCAGGCAAGAGAAAGA
AATAAAGGGTATTTCAGATAGGAAGAGAGGAAGTCATATTGTCTCTGTTTGCAGATGACATGATTGTATATTAGAAAAC
TCATCATCTCAGCCCAAAATCTCCTTAAGCTGATAAGCAACTTCAGCAAAGTCTCAGGATACAAAATCAATGTGCAAAA
ATCACAACATCCCTATACACCAGTAACAGACAAACAGCCAAATCATGTGTGAACCTCTCATTATAATGTCTACGAAGA
GAATAAAATACCTAGGAATACAACCTTACAAGGGATGTGAAGGACCTCCTCAAGGAGAACTACAAACCACTGCTCAAGGA
AATAAGAGAGGACACAAATGGAAAAGCATTCCATRCTCATGGATAGGACGAATCAATATCATGAAAATGGCAAAATGGC
CATACTGCCCAAAGTTATTTATAGATTCAATGCTATCCCCATCAAGCTACCGTTGACTTTCTTCACAGAATTAGAAAAA
ACTACTTTAACTTCATATGGAACCAAAAAAGAGTCTGTATAGCCAAGAAAAATCCTAAGCAAAAAAATTAAGCTGGA
GGCATCACATTACCTGACTTCAAACCTATACTACAAGGCTACAGTAACAAATATAGCATGATACTGGTACCAAAACAGAG
ATATAGACCAATGGAACAGAACAGAGGCCTCAGAAATCACACCACCCATCTACAACCATCTGATCTTTCACAAACCTGA
GAAAAACAAGCAATGGGGAAAGGATTCCCTATTTAATAAATGGTGTAGGAAAACTGGCTAGTCATATGCAGAAAACTG
AAAATGGACACCTTCTTATACCTTATGCAAAAATTAACCTCAGGATGGATTAAAGACTTAAATGTAAGACCTAAACCA
TAAAAACTCTAGAAGAAAACCTAGGCAATACCATTCAGGACATAGGCATGGGCAAGATTTCATGACTAAAGACCAAAA
AGCAATGGCAACAAAAGCCAAAATTTACAAATGGGATCTAATTAACCTAAAGAGCTTCTGCACAGCAAGAAACTATC
ATCAGAGTGAACAGGCAACCTACAGTGGGAGAAAAGTTTTCGAATCTATTACCTGACAAAGGGCTACTATCCAGAATC
TACAAAGAAATTAACAAGTTTGAAGGTAAAAACAACCTCATCAAAAGTGGGTGAAGGATAAAAAACAGACACTTCT
CAAAGAAGACATTTATGGAGCCAACAAACATATGAAAAAAGCTCTTCATCACTGGTTCATTAGAGAAATGCAAAATCAAA
ACCACAACGAGATACCATCTCATGCCAGTTAGAATAATGATCATTAATAAAGTCAGGAAACAACAGATGCTGGAGAGGAT
GTGGAGAAAACAGGAACACTTTTACACTGTTGGTGGGAGTGTAAATTAGTTAAACCATTGTGCAAGACAGTGTGGCAATT
CCTCAAGGATCTAGAACAAGAAATACCATTTGACCCAGCAATCCCATAACTGGGTATATACCCAAAGGATTATAAATCA
TTCAACTATAAAGACACATGCACACGTATGTTTATTGCGACACTGTTTACAATAGCAAAGACTTGAACCAACACAAAT
GCCACCAAGGATAGACTGGATAAAGAAAATGTGGCAGATATACCATGGAATACTATGCAGCCATAAAAGGATGAG
TTCATGTCTTTGAGGGACATGGATGAAGCTGGAACCATCATCTCAGCAAACACAAGAACAGAAAACCAACACTG
CATATTCTCACTCATATGTGGGAGTTGAACAATGAGAACACATGGACACAGGGAGGGGAACATCACACACTGGGGACTG
TCGAGGGGTGGGGGGCTGTGGGAGGGATAGCATTAAGGAGAAAATACCTAATATAGATGATGGGTTGATGTGTGTAGCAA
ACCACCATGGCATGTGTATACCTATGTAACAAACCTGCAGTTCCTGCACATGTATCTCAGAACTTAAAGTATAATAAAA
ACTCAAACAGCTCTACATTGTTATTTATTTAAACCTTCAATTTACTTGTCTAAGAAATTATCTTTTTTTTTTTCATTCTCTC
TTCACTTCTCTCACCAGCAATGCGATTGGGGTTTTTTTAAAGGCCACTTTAAAGACATTGAAAATAATACCTGTTTGT
TTCACTTCTATTATCTTATTACATTCAATTTGTCTTTGAATGTTCCCAAGTTTCTGGTATGACACTACGAATCTAAGTT
ATTCCAGACTTCTCTATTCTTTCATGTATTTAGAATACATTTTTCAAATTCCTAGGCTGAGGTATTAATAACTTTGCCC
AAATTTACCTTTCAAATGTATTTACCATCCCTGTATTACTCAGTACAAAAATTTGATTTTTTGGAGACATATTTGTACA
TATTTATGGGATACATGTAGTATTTGTTACATGCACAGAACATGTAATGATCAAGTCAGGCTATTTGGGCTATTCTC
ACCTCCATTATTGATTATACCTATATGTTGAGAACATCTTAAGTCTCTTTTATAGTAAGTTTGAACATATAATACTA

360/375

TACTATAGTCACCCCTACTCTGTTATTGTCATATTAGAAATTTTTCTCTGTGTGTTTGTACCCATTAACCAACCTCTAC
TTCATTACCCCCACCACCCACACCCCTTCCAATCCTCTGGTGTCTATCATTCTATTCTCTACTTCCATAAGATCCA
CTTTTTTAGCTCTTACATATGAGTGAGAACATGTGATATTCTTCTTTCTGTGACTGGCTTATGTCACTTAAGATAATGA
CCCTTCAGTTCTATCCAAGTTGCTGTAAATGCCATCATGTTAGTCTTGTATTATGGCTGAATAGTATTCATTGTGTATA
TATATATATTCTTTAACCATTCATCCATGATGGATACTTACGTTGATTCTTATCTTTGCAATTGTGAATGGTGCTGCA
ATAAACATGGGCTGCAGGTATTCCTTTGATATATTAATTTCTTTCTTTGGATAAAATACTAGTTAGATTACTGGACTG
TATGGTAGCTGTTTTTAGTTTTTTGAGAAATCTCCATACTGTTTTCCAAATGGCTGTACTAGTTTACATTCCCACCAA
CTCCACCAACAAGAAATTCCTTTTTCTGCATCCTCACCAGCATCTATATTTCTGTCTTCATCTTCTCTCTCTCTCTCT
TTGACAGGGTCTTGCTCTGTTCCTGTTTCCCAGGCTGAAGAACAGTGGTGATTACAGGTGCAATCAGGATGCACTGC
AGCCTTGAACTCCTAGCCTTAAGCAATACTCCTGCCCTCAGCCTCATGCGTAGCTGAGACTACAGGCATCAGACTTTTTGT
CTTTTTTAGTAATAGTCATTTTAACTGGAGTATGATGCTATCTCATTGTGATTTTAAATTTGCAGTTTCCCAGTACT
GATGTTGAGCATTTTTTAAATATGCCCATTTGTCTTTTTTTGAGAAATATCTATTCATGTCCTTTGCCCATTTTTCTTCT
TAGGCAGAGTCTCATTCTGTTGCTCAAACCTGGAGTGCAGTGGTGAAATCGTGGCTCACAGCAACTTCTGCCTCCTAGGC
TCAAGCAATTCCTCCTGCCCTCCCTCCCCAGTGGCTGGGATTACAGGCGCCACCACCAGTCCCAGCTAATTTTTGTATT
TTAGTAGAGACGGGTTTACCATGTTGGCCAGGCTGGTCTCAAACCTCTGGTTTCAAGTGATCCACCTGCCTCAGCCT
CCCACAGTGTCTGGGATTACAGGTGTAAGCCACTGCACCTGGCCCTTTACCCACTTTTTAGTAGGATGATTTGTGGTCTT
TTACTGTTGAGTTGTTTTGAGTTCTTGTATATCTGGATACTAGTCCCTTGTGGATAAAATATCTTGTAAATATTTCT
CCCATTCACAAGCTGTATCTTCAGTCTGTTGGTTTCTGTGTAGAAGAATTTTAGTTTAAATATAGTCCCATTTGTCT
ATTTTTCTTTTTGGTGCTGTGATCTAGAGATCTTAGCTATAAAATCTTTGGTCAGACTGATGTCCTGAATTTGTTTTCC
CTATGTTTTCTGTAGTAGTTCATAATTTTGGGTCTTATGTTTAACTCCTTAAGTGAATTTGAGTTGATTTTTGTACAGG
GTGAGAGATGGGTCCAGTTTCATTCTTCTGCATATGGATATCCAGTTTTTCTATTCCATTTAGTGAAGAAAGTGTCT
TTCCTCAGTGTATATACTTGGCACCTTTATAGAAAATCAGTTGGTGGTAAATGTGGTATATGCTGGCATCAGTGTAGT
GTGTCCAGGCGGGCTGATCTGGGGCTTCCAGTCAGCTTGCTGAGGTGCTGGCAATGGCAGCTGTGGGCCAGGTGGATG
GGCAGGTCCATAGGCCCTGGGCATCAGGCATGGTGTGGGTGATGGCAGTTGCAGTGGCAGGACAATCCTCTGGTACCCA
AGTAGTCCCAACTGATTTTTCAAGGTGGCTGCAGGCCATTTCCAGGCCACAGGTGGTTCATGTCTGTGGGTGGGGGGT
GTATGCTGGCTGTGATGGTAGTGGCAGGTGGGTGAACCCATCTCCAGGCCCTCAGGATGAGTGTCTCAGGCGCCAACAG
GAATAGATGGGGCTGAGCAATCCCAGGCCCTGCATGGGCACTAGGGAGAAGGGAGACAGAGGTGAGCCTCAGGCCCC
CCGATGGTATATATAGGCACTAGCTATGGTAGGCAGGGGCATGGTGATTTCCAGGCCCTCAGTGAATGCTTGGATGGG
AGGACCAGCAGCTACACCCTAGCCATGTTGCTGGGGTGTCTTTCATTGGCAGAAGCCTTAGGAGGGCCACTGGGAGCAC
ACACTTTGGCCCCAGGTGGTAGTTGCTGGTGGGGTAGCCTGTTCTCAGGGTGCTTCTAAATGTACGGTACCCTGCTGAT
GGGGATGGTGGGTAGCTTCCAGTGGCCCCACATTGGATATGGAGGCAGCAGCCAGCAGCAGGGTCTGCGTTAGGG
GGAGGTCAATGGGGCTCAAGGAATCTGGAGTTGCAAGGTCTGTGGGGTCCCAGGGTAGGATGCAGTCTGCTGGGCTTTC
AAAATGGTACCTTGCTGGAGTGCTTAAGAGTGGGGTAAGAGGGAGGGTGGGTGGGGTGACCCAGTGTGAGCTCCCCAT
ATGAAGCAATGCCATCATGGGGTCTCCAGCCAGTGCCCTATGTCCTAGCAATTCATTCTTGGCTCCTGGCATCTCA
AATGTTTTGTAGATGCCTTCTTGTAGCAGCCAGTCTCGTCCCTTTCTTGAAGTCAATGAGCATCAAATGTGTTTCAGGA
TTCATGAAATAATTCTGACAATAATTAGTATTTTTTATAGGAATTGGAAATGTTTATGTCAGTATACCGCAGTGT
GTCAGCTCTAGAACTTACGAAGAAGAGGAAGAGGAGAACAAGTTGACTCCTGTGAACGTTTTTCTTTTCTCAGGG
CTTGTGTGGGTCAAAGGACTCTCCAGTGGCTAGGATTGCAGGAGTCCATGGTAGGAAGGTGGGGCACTGGGGGCTACTC
ACCTACTCTTTCCTCACATTAGGGAGCCCCCTCAGACTCCTTGCTAATCCCAGCTGAGCAGGCTACTTCACTTTCCTC
TTGTTTTTTCATGCTAGGTGTCACTTCCGTGTTGAATTCAGCCTTCTCTCTTAGGTGATCTATTTTTATTTTACAAGTT
AGAAATATAAGTGCAGAGAAGTTAAACAGCAAAATCTGTGGCTTCCAAGAGTGGCAAAGCAGTTTCTAGCCTATGTTGG
CTGAGTTTTGACCAAGCCTCTGATATGCATACACATATATACATGTTTCATGTACGTGTACTTAAACATTTTTATTCCC
ATGTTTTAAGGCTAGTTGAATAGGGGTGAACACAGAAAATCCTAGCAATTCATTCTTGCACCTCTGGCATCTCAAATG
TTTTGTAGATGCCTTCTTGTAGCAGCCAGTCTCGTCCCTTTCTTGAAGTCAATGAGCATCAAATGTGTTTCAGGATTC
TGAAATAAATCTGACAATAATTAGTATTTTTTATAGGAATTGGAACATGTTTATTGTCAGTATACCCAGTGTGTTGTC
GCTCTAGAACTTACGAAGAAGAGGAAGAGGAGAACAAGTTTGAATCCTGTGAACATTTTCTTTTTCTATAATTTACG
CATATGCTAAACAAGCAGCTAGTTTCAAAACACAACTTACCTTGACAGGAACCTAGGTCTCACTGTTGAGAATGTAGTCT
CCTCTCTCCCCACATAGCCCTAGGGTTATTAGGATGAAGGAGAAGAAAAACATACCCAGAGCATTTTATAATTTCCA
TCCTTCTCTTCTGTTATGCTAAGGTTACTAGTACCATGACCTATGTGAACCTCGTTTTCTTGAATAAGAAGATAAAAGC
GTTCCGTCCATCAAGGAAGACCTCAAGAGAAATTCAGGTTTCAAGTCTCATGGTACAAGAGCCAAGTGTCTTCTCTG
ATCATTCCCAGGCCTGCTTTTGTATCTGAGCAGTGGCTTTCAAAAATATGCTGATGAGATTGCTCTCTCACTTAAGA
TTAAGAAAGAGTTGAAGTTCTTCAATGTATATCCCCAGCCTGAACTTGTCTTGAGGAAGATTGTAGTAGTAATGAAG
GGTGACAGTAACCTAAGGGTGAAGAATGTAGAGAGATTTTTCCCAAGAGCAATCCAAGATACTGCTTGAACATCCGGG
GTCCACTGACATGCCCCCTGGACTCCAGGAGAAATCTGGAAATGTCTGGACCTGCAATGAGACACACCAGCTCTCAAAT
GTGTCACCTCTGGGCATATCTTTAATCTGAGCTCCAATTTTCTTTCTTGTGAAGAGTCATTACACATGGCTGTTTTATTT
ACTAATTCGTTTTTTTAAATTTAAAGAAATAAATTTGTAGGAGTAATATAGTTACATTGTTTACAAAGTCAAATTCCTTACAT
GGCTCATTTCCATCCATTTTCATGGATGTGTTACCTTCTGGTATTTTATTAGAAATTTGCTTTTAGACTTTCTGTTGCTCACC
TCACAGTTCCTGTGTATCTTAGTTTCTTTCTGTTTTTTTGTGTTTATGCGAGAGGTTTTCTCACATTTGCTGATA
ATCCTTGGCAGTCAGTTGATTTGAAGAGTTAGACATTAGAAAGCCAAGTGAAATCCTGTGTGTGTACAAGGTTTGT
GACTGGAAGCTTCATGGGGATATCTTGCTTGGACATTTCACTGAAGGACATCCAAAACCTGTGCGGTTTTTAGAT

361/375

TTTTTTCTTGGATTGTTGGTTTCTTGGTGATCTTACTCCAATCTCTTTGGTGCCATAATTCTACCAGCTGAGTATGA
GAAGGAGCTGGGGTTTCTCAATGCAGAATATGTACTTTGGTTCTAATATGGTAGTCTGGTTCTAATATTGTAGCCTTTTT
CTCAGCAATGGTTGCCACATCTGAGTCCTGAATCCCTTTGGAATCAGCCTCTCCAGAGGGGTGTATGTTTGAACCGGCG
TGAGTGAAAGGTAGTCATCCAATGACATGAGGTGGGTGAAAATATTTTAACTGC'TTTATTTATAAAATTTTCAACTGACC
CTCCTGTTTTTGAACCCACCAGTGTCCCCACTTCCATAAGTCCCTGGATCCTCAATTTTCCAAGTCTTCCCTGGAATTC
TATGGAGTAAATTAGCTTACTGATGCATTTCCCTTACTTGCCTTAGGTTTCTGCTCACTCTGTTCCCAAGTCAATTATG
ACCTACCTGGCTGCTTCCAGTTTCTGAAATGTTGTGTGTGTCAGCTTCTTTTCCATTGCTTTTGTCTTGAAGCTTATGC
CATTTTAAAAAATTCTTTTGTCTGTGCTTTTGTGGAGAAATAGAAAAATATGTACATTCAATCCCCATGTTTAAAGTGGA
AGTCCCTCATAAAATTATATTAGAAATTTATTAGAAATATATACACACATATGAATATAGATAGATATACACTCTCTTT
TTTAGCATACATAGTGCCTGTTATTTAGCAGGTACTAAAAAATAATATGTATATGTATATACATGTAGCAGAAGGCTAA
CAGGAACCTTAGATACACTCAGGAATATATGATAGCATGGAAGGTTGGAACGGTGGGCCCTGTGCACAATCAAGTCATGAG
GACTTAGAAAAAGACGGAACCATGGCTGGGTGCGGAGGCTCATACCTGTAATCCAGCACTTTGGGAGGCCGAGGCCAG
TGGATTACCTGAGGTCAGGAGTTCAGGACCAGCTTGGCCAACATGGTAAACTCTGTCTCTTAAAAAATAAAAAAAAAA
AAAAAAAAAATACAAAAATTAGCCAGGCATAGTGGCAGGCGCTGTAATCCCATCTACTCGGGAGGCTGAGGCGGAGGT
TGCTGTGAGCCAAGATCGCGCCATTGTCAGTCCAGCCTGGGCAACAAGAGCAAACTCAGTCTAAAAAATAAAAAAAAAA
AAAAAGAAAGAAAGAAAGAGAAAAAGAAAAAGAGAACTGGCAGGATTGAGTAATTAAGCCAGAGTCAGAAGGAGAAG
TACTTCTCAATACAGCATGGTATCTTCTGTTTTTGTAGACACGGCTCTACCCAGCTCAATTGATTTCATGACTGTGTGGGT
GTATTTTGTTTTGTTTTTCTTTTTCTAGACTTTGTCAACAGGAAGTAGGTGCCCATGTTGTTGATAGAAAAGTTTGTAA
GTAGGACTGCACAGACTTGGTTTTGGTTTTCAGCATTTGGCAATAATCAGTCTTTCTGCTTCAGCCTTCAGAGAGCCACT
TCATCATTCTTTCTGGCATCCCTGTGATCATATGATTACATATCTAATCAGTGTAAACAACAGCTACTTAAAGAAGG
CATGCCATTAAAGATATTGTTAATATCTCTACATTGCCTTTCAAACATATGTAAGCATTCTAACTTGGAGTGAAATCTT
CTTAGGTGCTTTATATGTTGAAATTTCTACAGTCAGCTGAGGAAGAATGTATACGGCTTATCCCCAAAATAAGATATT
CCAACAAATAATGTTTATGAGAGCTGTTAATTTATGTTTAAAAAAGAGCTATTAATAAAATGTTTAAAGTAAATTAAT
TGGGAGCTTGATTGGCAGTAGGAATATTAAGAGGATTAGCTAGATAACTAATGTAGAAAAATATATATGTTATTGAGT
CAACAAAAGCTTATATAGATTTAATTACTATGATGATATTAGATTACTTTCATAATTAGAATCTTTGTAGAAATGTTTTG
GTATAATTGCATTCAATACTCAAAAAGTAAGCTTAAAGAATGATATTTTTAATTATTTAATTCCAGTAAGTCATAAG
TCTTATTTTTTGCATTATATGAGGCTGAATTAAGAGCAGAATGCCATCTGACATTTCAAAATTTTCATGGAGAGAAATGT
ATCTGAAATCATATACACCAAAAAGATAAGTAAATTTGATAGAAAAAATGAATGTATTTTAGCTGAGTTCTGACATG
CATTTTATTACAAATCAAACCTTCAGAACACAGAAGACAATTTCTTATTTTGAATTTATAGAGACTATTCTAATATTAA
ATTGATTTTTTACAAGCTAGCAAATATTTTCAATAGTTGAAGCTTCGGAGTTTCTCATTATCTAAGCTATGTAAATGCA
TGCAAAGTTTCTTCTAGAAAACAAATTACTGAAAGACATTTTCTGATTTGTATTTGGCTGTGTTATTTCCCAAGAGGT
GAAATTATTAAACATGCCATTCGAAAGCCAGTAACTCCTTAGTACAGGTTGAACATCCCTAATCTGAAAATCTGAAATC
TGAAATGCTCCAAATCTGAAACTTTTTCAATGCCAACATGATGCCACAAGTAGAAAATTTTACACCTGATCTCATGTG
ATGGGTACCAATCAAACCTTTGCTTCATGAACAAAACCTATTTTAAAAATATGTATAAAATTTATCTTCAGGCTATTTGTTA
GGAAATAAAATAAACTCTAAGTCCCTCCGACTGACCCAGCGGATTCTCTCTTGGCCAAGGGAACCCCAAGCAAAACCT
TGGAAGCTGAATTCATGGCTATGATGGGATGGGAGATTGGGCATATGCCTCATTATATCCCCACCCCTCGCTAACAGTCG
TTAGGTTTTCTTCTTAAACAGCTAAACAGAAACAGCCTTTCCAAAAGACTACTAGCTTATCTTCCAGATACGTAACA
CTCAGATGAGATTCAATTATGTTTACCTTATTTTATGTAAGATGTAGATTACCAGGCATACTAAAGTTTTACAAGT
ATGTAATCATTGTTCTCACTGCTGCCACCACCTCCCTGCTTTTAAAGGAAAATATATAAATACTAAACCTCCTAAG
AACCTCTTTGGAAAAACAGTCAACATGCTTCTGTGACTCTCTATTTTCCAGGTATGCCTTCAAGTGGCTCAACAA
AGCTTGATGCTTTGAAACTTATGCTTCAATTACTCATTTTCAGTTGTGAGTGTAAAGGTGTATGAAATAGAAAAGAA
TTCTGTGTTTAGACAGTTCTCATCAGTGAGATATCTCATTGTGTATATCCCAAAATATTTCAAAAAAATGAAATCCAAA
ACACTTCAGTTCCAAGCATTTAGGACAAGGGATATTCAATCTGTATCAGAAACATGCGATGGTGACCACAAAAGGAAT
CTGGCAGCTGAAAATTCTGAGTCACTATCATGTCAAACATAAAAAATTTTATACAACCTAAAAAATAAAGCTGCATAA
TCATTAAATTTATATTATTGTTAAATTTATCATACAGTAAATTTGATTTTTTTCTTTTGTATGTACAGTTCTGAAACCA
CCTTTGCAAAAATTGCAACACTGAGAAAATTTGACAGTGAAAGAAATTTGACCTAACCAACTCCACATTGCCTTTAAC
CTCCAAACTGCCCTTCATTCTGGGCATGGCCTAAGCTAACTTTGGGAGAAATTTAGGTTATAGTTTAAATGATAATAG
CTCTTTTCAAAACTAACTGCCTTTGTAAACTAATGAAAGGCCACCAGTTTACGAAGATAGGAGGGCCTGAATTCCTGC
TAAGATATAGGCATAGTTAAGTGATTACCAGCCATTATTCAGAGGTCACAAGATTTTCAACTTCTCAATTACTCCTG
TAAATAACGTTACTATTGTAGAACCCTAAAATTACTATTGTAGAACCCTAAAGTTGACCTTTTGTAGATGTCTTGTGAGGCT
TTTGCATTTCTGATGACMCCAGTGTCTTGAACAGTGACTCCTCTGTGGACCTTACTGGAAGCTGACTCAGGGCACAC
GAGGACCATTTTCCACACCCATATGATTGCATCCCCAACCAATCAGCAGCACCCTTCTTTGGCCACCAAATTAATCT
TGAAAACTCTAGCCTCCAAATTTTCAAGGAGGCTGATTTGGGTAATAATAAACTCTGGTCTCTCTGTTTAGCTGGCTC
TATTTGTATTAACTCTTTCTCTACTGCAATTGCCCTATCTTGATAAATCAGCTTTATCTGAGCAGCAGGCAAGAAGAA
CCCATTAGACAGTTACAGTTCTGTAAATTTTAAACACAAACATTGTTTCATGTAACCACCAGTAGGATCACCATCTGGATC
AGTTTCAACCCATAAAAGCTTCTCATAATACCCTACTCCATGACACTAGGAACAGCTACTAGTTCTCCATCCCAATT
GTTTTCATCTTTTGAAGATTTTATATAAATGGAATTTGATAGTATAGTATCATCAATTTTAAATAAAATTTTCAAGATGATT
CACATTCATAAGTGACTCTATGATGCTGATATTATTTATAGCTTATGCCAAACTATGCCTTTCCATATAT
GGCCAAAATGTGTATTCAATATACCTCTAAGTGGGAGGATCAATTGAAAGTGTGTTTACTAACTCTATAACACAAA
GGAATTCAGGATACCATAGGGATCATTCAACTGATTATAACACAAAATGGGGAGAGCCAATTTCCCTGTCCCCAGAGA

362/375

CCTCTGGGCAGCTCTAGCTCCCTGAGGGASSCAGCACAAACAGTGGTCCCTTTCTCAGGAGATACCTGGGACACCAGGCA
 GTTCCTCTTAGACCTTCTGGGAGAGGGGTTCCAGCAGACGCTGGATAGGAGCAATAGCACTGAGAAGGGGTAGCAGAA
 GCAGCAGTGGCCTTGACTTGTGTATGTGCACATATGCAAGGAGCCCTTGCGAGACTCCCTTCTCCCCAGGTAGTAGGGT
 CTTGCTTGCCCTTGCTAGTGGCAAGAACCCTAAAGTTTGTGTTACTGTTAACGTAACCCCTATTTCTACTTACAATGT
 GGTGAGGCCTTGAAAACCCAAGTTATATAAACATTTGTCTTAGTTCACTTAGGCTGCTTTAACAAAAATACCATAAAC
 TGGGTGGTTTATAAACAACGAACATTTATTTCTCACAGTTCTGGAGGCTGAGAAGTCCGAGATCATGCTGCCAGCAGAT
 TCACTGTCTGGTGTGGTCCCATCCCTACACAGTGAAAGCAGCAAGGTCACTTTCTGTGCTGATTTATAAGGACACTAA
 TCCCAGATCATGAGGACTCAACCCTCATGACCTAATCACCTATCAAAAAGCCCCATCACCTTAGGGTTTAGGATTTCAAA
 ATATGAATTTTGGGTAGACACAAACATTGAGACTGCAGCAACATTCAATAGAGGCAACTCACCTACCAGGAGGCAACTT
 TTCATTCTGATGCCCAGGTATGACAGACCTCAAATCTGTTACCGTCCCATGAACCAGGAATTATACAAAGGGTAGAGGG
 GCATAGCTCTGGGTGAAGAGCTGCACTCTGTTCACTCTGGGCTCTGTGTGGTGGTGTCCCAGGTAGTGTGAGTCCAGCT
 GTTAAGTCCAGTGAGGCTCAGAAAGGTGATGTCAATTTGTTCAAACTCTCCAGCTAGTTTGTGTGGTCAATCATAACCAG
 ACCCTATGAAGTCTAATCATACCCAGTTCTGTAGGCTTTTCTCTTCAATAGGTCCATTCTTATCTCTAACTGAGACCAC
 CTGCATCCTCATAGCTTAACATATCAGTATGGAAAACAAACCATCTGTGTCACTATGACTTTTACTATTTGTTCAGAAAA
 TTCTTGTCCAGGAAGATAAGACGGTGTACAATAAATAACATCAATGTTTACTTCAGAAAAATTTCTGAAAAACCAATTTAT
 TCAGATGATAGATTGCTCATTGAAAAAATAAACCCCTTTTTCAGGACAACAGATTCTCTCCAGTCTAATAACTTGT
 TATCAAAGATCTATTTTTCAGGACTTCAAGACCCTCTTATCAATGTCCACCAATTCTAAACTATAATATCATGAAC
 TTGCCGAATTTCCACCAGATTTCTTCTTGAAGGCCTGACTTTAAACCACTTGAGCTCAGACCCCTTAATGTTTATAAA
 TATCTACCTGTGACCTCTCCCTTTTGAAGATTATAAGGACTTTTTCAGGTGTTGCACTCTCTTACTGCAGGTAAATAA
 ACTTAGCTTTGTTGATCAATAGTTTATTCTGATGCTTCTTTGAAAGTCAGCAATCAACAGTTCTGGGGCCTCAGTA
 GGATTCACCTCAATAAATTTCTGCTCCTGCAGTTTAAAGAACCTTAGCCCTAAACAGTGTGTTCTTCTGAAGTTTGCCATT
 GGAAGCCTCCCCCACTGCAGTGTTAAGGTAAAGTCTCTCATTGGATTGAGTCCCGGTGTCCTTTCCATAAAGCTCTTAA
 ATTGTTTATTTTCTTCTTAGAAATAAGAACTTTTAAAGAAATTCCTGGATTATCTGATCAGATTGAAAAATGTTTATT
 CTTTGTGGAATGTTTATTACTAGTAACATTACTCTTTTGTCTTTTATCTTATTTGTTGTGAGTCTATGAGAAGAAG
 CTCACAGGGAAGAAGACAGCCGTAGACCTGGCAATTTTGTCTCAAACCTGGCTCAAAGATAACAATAATATCAGCGGGTC
 TCATCAAACCTGGCATTCTTATAGAATAAACTTTGCTCTGGGTCACTTACTAATATCTTACAGAAAATTTATAGCAGCAG
 TTGTATATTGAGGGTGTGAATAAAAACCACCAGAGAAGCTTTTGAAGAAATACTATGAATAGATTTCTGCTTCTGGCC
 AAAATGAAGAAACAGGGACCAGATTTACTCTCCAGTAAACCAAGTGGAAAAAACAAGACACAATATTGAAAAATAAAA
 AGATTTTTCAGACATCAGGCAATGAAGAATAGTGATCCAAGAGAAACAAGAAACAAGATGAATCTTATGTTTCGCCACA
 GCTTACTGTCTGGAGTGAGTATCAAGACTGTGGTACAGAAAGGGAAAACCCAGATGGAACCCCTGCCATCTCCCTAAGTG
 GAGTCTGGGGAGGGCAAAGTGAGTAGAGTTTGCAAGGAAAGATATGGGAAAGGAGACAGCTGTGCAGAGAGAACTGG
 GGATCTGTACAGGGTCTTCAGCTGAGCATGAGTCAGCATATGCATGTGAGGAAACTACCCATGACTGGGGAAAGAATCA
 GCTGGAATGATTACGGGGTATAGAATCCAGGGCTCAGAATCATTCTGTTTCTATAGGAAATGGGCATTGAGTAGCATA
 CTTGGAAGAATTTTGTCTCAGTCATGCAGTAACATAGAACCTTAGACTAAATACTACTCTGATACCACATAATGAACT
 CAAAATAAGACCCAAAAGAATCAAACCTGTTTATAAGTAACTGAGTTTCAAATAAAGTTCAAGAATATTTATAGAAATA
 CCATCTAACAAAGCACAAAATTAAGATAAAGGGTCAAACCTATTGCAAGTAATTTTAAAGTGTGTTCTAGAACAAAGTTC
 AAAAGTATTTATAGAAATACAAAAGGATCCAAAACCTGTCCACAAAATATGACCCATAATGAAGAGAAAAATCAGTCA
 TTTGAAACTAACCAGAAATGACAAAGATGATAGAATCGGCAAGACATTAGAAGAAGTGTAAATTGTACTTTCGCATGTT
 CAAGAAGCCAGAGGAAAAGACTGAAACATGGTAAGCAGAAACATGGAAGATATAAAAAGACTAAAAATCAAACCTTAGAGA
 TGAAAAACATTATGTGAGATGAAAAACACACTGAGTAGAATTAAGGCAATTTGGAATTTTCAAGACTAGTGACTTTA
 AGAATTGAGAGATAAAAAAGTACACAAAAATGAGAAACAGAAGTGTGTGAGTGTATGGGACAACCTTCAAACCTAATGCG
 TAAATTGCAGTCCCTGAAGGAAATGAGGGATATGTTGGAAAAAATATTTGAAAAAATAATGGCCAAAAATCTCCCAA
 GTTTATGAAAACACAGATTCAAGAAGGTCAACAAATGCTTAAAAATAGAGAAAGTCTAATATTAGGATACAAGGTCT
 TGACCAGGTGTGGTGGTTCATGCCTGTAATCCCAGCACTTTGGAAGGCCGAGTGGGAGGTGAATCACTTGAGGTGAGGA
 GTTCAAGACCAGCCTGGCCAACATGGTGAAAGCCTGTCTCTACTAAAAACACAAAATTAGCCCGGCGTGGTGGTGCAC
 ACTATAATCCCAGCTACTCGGGAGGCTGAGACAGGAGAATCACTTGAACACAGGAGGTGCAGGTTGCAGTGAGCCGAGA
 TTTGTGCAATGCACTCCAGCCCTGGGTGACAAAGTGAGACTCCGTCTTAAAAAGACAAAAACAAAAACAAAAACAAA
 AAATGGAAATAAGGTCTCAAATTAATAACTTCAGCTTACACCTTAAAAAAATTAGAAATATCATT

363/375

Position of N ambiguity code		
30102 R	150961 Y	290063 R
30205 Y	152214 R	290164 Y
30559 Y	154374 Y	290801 R
30699 K	157074 M	292925 R
34304 R	157272 R	293201 R
34516 K	160863 Y	293611 Y
34782 R	161195 R	295755 R
35697 K	162720 Y	296143 R
35810 Y	163290 R	296739 Y
36817 Y	165441 K	297107 W
40290 K	166462 R	297460 Y
40454 M	168136 Y	297895 R
49148 S	173481 R	298027 Y
55023 Y	173519 R	298152 N
58397 Y	175259 S	298153 N
58622 R	175603 Y	298585 S
58633 S	181225 Y	298605 K
74447 R	197941 M	298799 R
75896 K	198444 Y	299792 M
82244 S	198745 R	300815 Y
88456 W	221134 R	305880 R
88499 R	222532 K	306978 M
90688 S	224195 R	309436 Y
99035 R	224801 Y	309763 Y
102977 R	226923 R	313529 K
104552 Y	227254 Y	313971 R
104862 R	227460 S	317210 S
105225 Y	228326 K	318829 Y
111252 Y	228647 Y	410826 R
111781 Y	228831 R	
112118 M	230175 K	
118914 W	230288 Y	
120628 R	232201 M	
123312 R	232338 M	
123426 S	234332 R	
125304 M	235271 R	
128015 Y	263539 K	
128393 R	270257 R	
129360 Y	270458 Y	
129361 Y	270498 R	
131865 M	271159 Y	
132562 R	274150 Y	
135112 K	274353 M	
138281 Y	275602 Y	
138806 R	277422 M	
147700 Y	278146 R	
147715 R	286615 Y	
148161 Y	289348 S	
148236 Y	289425 R	
148606 K	289868 R	
	289979 Y	

364/375

<210> 2
 <211> 809
 <212> PRT
 <213> Homo Sapien

<400> 2
 Met Glu Ala Glu Gly Ser Ser Ala Pro Ala Arg Ala Gly Ser Gly Glu
 1 5 10 15
 Gly Ser Asp Ser Ala Gly Gly Ala Thr Leu Lys Ala Pro Lys His Leu
 20 25 30
 Trp Arg His Glu Gln His His Gln Tyr Pro Leu Arg Gln Pro Gln Phe
 35 40 45
 Arg Leu Leu His Pro His His His Leu Pro Pro Pro Pro Pro Pro Ser
 50 55 60
 Pro Gln Pro Gln Pro Gln Cys Pro Leu Gln Pro Pro Pro Pro Pro Pro
 65 70 75 80
 Leu Pro Pro Pro Pro Pro Pro Gly Ala Arg Gly Arg Tyr Ala
 85 90 95
 Ser Ser Gly Ala Thr Gly Arg Val Arg His Arg Gly Tyr Ser Asp Thr
 100 105 110
 Glu Arg Tyr Leu Tyr Cys Arg Ala Met Asp Arg Thr Ser Tyr Ala Val
 115 120 125
 Glu Thr Gly His Arg Pro Gly Leu Lys Lys Ser Arg Met Ser Trp Pro
 130 135 140
 Ser Ser Phe Gln Gly Leu Arg Arg Phe Asp Val Asp Asn Gly Thr Ser
 145 150 155 160
 Ala Gly Arg Ser Pro Leu Asp Pro Met Thr Ser Pro Gly Ser Gly Leu
 165 170 175
 Ile Leu Gln Ala Asn Phe Val His Ser Gln Arg Arg Glu Ser Phe Leu
 180 185 190
 Tyr Arg Ser Asp Ser Asp Tyr Asp Leu Ser Pro Lys Ser Met Ser Arg
 195 200 205
 Asn Ser Ser Ile Ala Ser Asp Ile His Gly Asp Asp Leu Ile Val Thr
 210 215 220
 Pro Phe Ala Gln Val Leu Ala Ser Leu Arg Thr Val Arg Asn Asn Phe
 225 230 235 240
 Ala Ala Leu Thr Asn Leu Gln Asp Arg Ala Pro Ser Lys Arg Ser Pro
 245 250 255
 Met Cys Asn Gln Pro Ser Ile Asn Lys Ala Thr Ile Thr Glu Glu Ala
 260 265 270
 Tyr Gln Lys Leu Ala Ser Glu Thr Leu Glu Glu Leu Asp Trp Cys Leu
 275 280 285
 Asp Gln Leu Glu Thr Leu Gln Thr Arg His Ser Val Ser Glu Met Ala
 290 295 300
 Ser Asn Lys Phe Lys Arg Met Leu Asn Arg Glu Leu Thr His Leu Ser
 305 310 315 320
 Glu Met Ser Arg Ser Gly Asn Gln Val Ser Glu Phe Ile Ser Asn Thr
 325 330 335
 Phe Leu Asp Lys Gln His Glu Val Glu Ile Pro Ser Pro Thr Gln Lys
 340 345 350
 Glu Lys Glu Lys Lys Lys Arg Pro Met Ser Gln Ile Ser Gly Val Lys
 355 360 365
 Lys Leu Met His Ser Ser Ser Leu Thr Asn Ser Ser Ile Pro Arg Phe
 370 375 380
 Gly Val Lys Thr Glu Gln Glu Asp Val Leu Ala Lys Glu Leu Glu Asp
 385 390 395 400
 Val Asn Lys Trp Gly Leu His Val Phe Arg Ile Ala Glu Leu Ser Gly
 405 410 415
 Asn Arg Pro Leu Thr Val Ile Met His Thr Ile Phe Gln Glu Arg Asp
 420 425 430
 Leu Leu Lys Thr Phe Lys Ile Pro Val Asp Thr Leu Ile Thr Tyr Leu
 435 440 445
 Met Thr Leu Glu Asp His Tyr His Ala Asp Val Ala Tyr His Asn Asn
 450 455 460

Fig. 7.1

365/375

Ile	His	Ala	Ala	Asp	Val	Val	Gln	Ser	Thr	His	Val	Leu	Leu	Ser	Thr
465					470					475					480
Pro	Ala	Leu	Glu	Ala	Val	Phe	Thr	Asp	Leu	Glu	Ile	Leu	Ala	Ala	Ile
				485					490						495
Phe	Ala	Ser	Ala	Ile	His	Asp	Val	Asp	His	Pro	Gly	Val	Ser	Asn	Gln
			500					505					510		
Phe	Leu	Ile	Asn	Thr	Asn	Ser	Glu	Leu	Ala	Leu	Met	Tyr	Asn	Asp	Ser
		515					520					525			
Ser	Val	Leu	Glu	Asn	His	His	Leu	Ala	Val	Gly	Phe	Lys	Leu	Leu	Gln
	530					535					540				
Glu	Glu	Asn	Cys	Asp	Ile	Phe	Gln	Asn	Leu	Thr	Lys	Lys	Gln	Arg	Gln
545					550					555					560
Ser	Leu	Arg	Lys	Met	Val	Ile	Asp	Ile	Val	Leu	Ala	Thr	Asp	Met	Ser
			565					570						575	
Lys	His	Met	Asn	Leu	Leu	Ala	Asp	Leu	Lys	Thr	Met	Val	Glu	Thr	Lys
		580						585					590		
Lys	Val	Thr	Ser	Ser	Gly	Val	Leu	Leu	Asp	Asn	Tyr	Ser	Asp	Arg	
	595						600				605				
Ile	Gln	Val	Leu	Gln	Asn	Met	Val	His	Cys	Ala	Asp	Leu	Ser	Asn	Pro
	610					615					620				
Thr	Lys	Pro	Leu	Gln	Leu	Tyr	Arg	Gln	Trp	Thr	Asp	Arg	Ile	Met	Glu
625					630					635					640
Glu	Phe	Phe	Arg	Gln	Gly	Asp	Arg	Glu	Arg	Glu	Arg	Gly	Met	Glu	Ile
			645					650						655	
Ser	Pro	Met	Cys	Asp	Lys	His	Asn	Ala	Ser	Val	Glu	Lys	Ser	Gln	Val
			660					665					670		
Gly	Phe	Ile	Asp	Tyr	Ile	Val	His	Pro	Leu	Trp	Glu	Thr	Trp	Ala	Asp
	675					680					685				
Leu	Val	His	Pro	Asp	Ala	Gln	Asp	Ile	Leu	Asp	Thr	Leu	Glu	Asp	Asn
	690					695					700				
Arg	Glu	Trp	Tyr	Gln	Ser	Thr	Ile	Pro	Gln	Ser	Pro	Ser	Pro	Ala	Pro
705					710					715					720
Asp	Asp	Pro	Glu	Glu	Gly	Arg	Gln	Gly	Gln	Thr	Glu	Lys	Phe	Gln	Phe
			725					730						735	
Glu	Leu	Thr	Leu	Glu	Glu	Asp	Gly	Glu	Ser	Asp	Thr	Glu	Lys	Asp	Ser
		740					745					750			
Gly	Ser	Gln	Val	Glu	Glu	Asp	Thr	Ser	Cys	Ser	Asp	Ser	Lys	Thr	Leu
	755					760					765				
Cys	Thr	Gln	Asp	Ser	Glu	Ser	Thr	Glu	Ile	Pro	Leu	Asp	Glu	Gln	Val
	770					775				780					
Glu	Glu	Glu	Ala	Val	Gly	Glu	Glu	Glu	Glu	Ser	Gln	Pro	Glu	Ala	Cys
785					790					795					800
Val	Ile	Asp	Asp	Arg	Ser	Pro	Asp	Thr							
				805											

<210> 3

<211> 150

<212> PRT

<213> Homo Sapien

<400> 3

Met	Asp	Arg	Thr	Ser	Tyr	Ala	Val	Glu	Thr	Gly	His	Arg	Pro	Gly	Leu
1				5					10					15	
Lys	Lys	Ser	Arg	Met	Ser	Trp	Pro	Ser	Ser	Phe	Gln	Gly	Leu	Arg	Arg
			20					25					30		
Phe	Asp	Val	Asp	Asn	Gly	Thr	Ser	Ala	Gly	Arg	Ser	Pro	Leu	Asp	Pro
		35				40						45			
Met	Thr	Ser	Pro	Gly	Ser	Gly	Leu	Ile	Leu	Gln	Ala	Asn	Phe	Val	His
	50					55				60					
Ser	Gln	Arg	Arg	Glu	Ser	Phe	Leu	Tyr	Arg	Ser	Asp	Ser	Asp	Tyr	Asp
65					70					75					80
Leu	Ser	Pro	Lys	Ser	Met	Ser	Arg	Asn	Ser	Ser	Ile	Ala	Ser	Asp	Ile
				85					90					95	

Fig. 7.2

366/375

His	Gly	Asp	Asp	Leu	Ile	Val	Thr	Pro	Phe	Ala	Gln	Val	Leu	Ala	Ser
			100					105					110		
Leu	Arg	Thr	Val	Arg	Asn	Asn	Phe	Ala	Ala	Leu	Thr	Asn	Leu	Gln	Asp
		115					120					125			
Arg	Ala	Pro	Ser	Lys	Arg	Ser	Pro	Met	Cys	Asn	Gln	Pro	Ser	Ile	Asn
		130				135					140				
Lys	Ala	Thr	Ile	Thr	Val										
145					150										

<210> 4

<211> 745

<212> PRT

<213> Homo Sapien

<400> 4

Met	Ala	Gln	Gln	Thr	Ser	Pro	Asp	Thr	Leu	Thr	Val	Pro	Glu	Val	Asp
1				5					10					15	
Asn	Pro	His	Cys	Pro	Asn	Pro	Trp	Leu	Asn	Glu	Asp	Leu	Val	Lys	Ser
			20					25				30			
Leu	Arg	Glu	Asn	Leu	Leu	Gln	His	Glu	Lys	Ser	Lys	Thr	Ala	Arg	Lys
		35				40						45			
Ser	Val	Ser	Pro	Lys	Leu	Ser	Pro	Val	Ile	Ser	Pro	Arg	Asn	Ser	Pro
	50					55					60				
Arg	Leu	Leu	Arg	Arg	Met	Leu	Leu	Ser	Ser	Asn	Ile	Pro	Lys	Gln	Arg
65					70					75					80
Arg	Phe	Thr	Val	Ala	His	Thr	Cys	Phe	Asp	Val	Asp	Asn	Gly	Thr	Ser
				85				90						95	
Ala	Gly	Arg	Ser	Pro	Leu	Asp	Pro	Met	Thr	Ser	Pro	Gly	Ser	Gly	Leu
			100					105					110		
Ile	Leu	Gln	Ala	Asn	Phe	Val	His	Ser	Gln	Arg	Arg	Glu	Ser	Phe	Leu
		115					120					125			
Tyr	Arg	Ser	Asp	Ser	Asp	Tyr	Asp	Leu	Ser	Pro	Lys	Ser	Met	Ser	Arg
	130					135					140				
Asn	Ser	Ser	Ile	Ala	Ser	Asp	Ile	His	Gly	Asp	Asp	Leu	Ile	Val	Thr
145					150					155					160
Pro	Phe	Ala	Gln	Val	Leu	Ala	Ser	Leu	Arg	Thr	Val	Arg	Asn	Asn	Phe
				165					170					175	
Ala	Ala	Leu	Thr	Asn	Leu	Gln	Asp	Arg	Ala	Pro	Ser	Lys	Arg	Ser	Pro
			180					185					190		
Met	Cys	Asn	Gln	Pro	Ser	Ile	Asn	Lys	Ala	Thr	Ile	Thr	Glu	Glu	Ala
		195					200					205			
Tyr	Gln	Lys	Leu	Ala	Ser	Glu	Thr	Leu	Glu	Glu	Leu	Asp	Trp	Cys	Leu
	210					215					220				
Asp	Gln	Leu	Glu	Thr	Leu	Gln	Thr	Arg	His	Ser	Val	Ser	Glu	Met	Ala
225					230					235					240
Ser	Asn	Lys	Phe	Lys	Arg	Met	Leu	Asn	Arg	Glu	Leu	Thr	His	Leu	Ser
				245					250					255	
Glu	Met	Ser	Arg	Ser	Gly	Asn	Gln	Val	Ser	Glu	Phe	Ile	Ser	Asn	Thr
			260					265					270		
Phe	Leu	Asp	Lys	Gln	His	Glu	Val	Glu	Ile	Pro	Ser	Pro	Thr	Gln	Lys
		275					280					285			
Glu	Lys	Glu	Lys	Lys	Lys	Arg	Pro	Met	Ser	Gln	Ile	Ser	Gly	Val	Lys
	290					295					300				
Lys	Leu	Met	His	Ser	Ser	Ser	Leu	Thr	Asn	Ser	Ser	Ile	Pro	Arg	Phe
305					310					315					320
Gly	Val	Lys	Thr	Glu	Gln	Glu	Asp	Val	Leu	Ala	Lys	Glu	Leu	Glu	Asp
				325					330					335	
Val	Asn	Lys	Trp	Gly	Leu	His	Val	Phe	Arg	Ile	Ala	Glu	Leu	Ser	Gly
			340					345					350		
Asn	Arg	Pro	Leu	Thr	Val	Ile	Met	His	Thr	Ile	Phe	Gln	Glu	Arg	Asp
		355					360					365			
Leu	Leu	Lys	Thr	Phe	Lys	Ile	Pro	Val	Asp	Thr	Leu	Ile	Thr	Tyr	Leu
		370					375					380			

Fig. 7.3

367/375

Met	Thr	Leu	Glu	Asp	His	Tyr	His	Ala	Asp	Val	Ala	Tyr	His	Asn	Asn
385					390					395					400
Ile	His	Ala	Ala	Asp	Val	Val	Gln	Ser	Thr	His	Val	Leu	Leu	Ser	Thr
				405					410					415	
Pro	Ala	Leu	Glu	Ala	Val	Phe	Thr	Asp	Leu	Glu	Ile	Leu	Ala	Ala	Ile
			420					425					430		
Phe	Ala	Ser	Ala	Ile	His	Asp	Val	Asp	His	Pro	Gly	Val	Ser	Asn	Gln
		435					440					445			
Phe	Leu	Ile	Asn	Thr	Asn	Ser	Glu	Leu	Ala	Leu	Met	Tyr	Asn	Asp	Ser
	450					455					460				
Ser	Val	Leu	Glu	Asn	His	His	Leu	Ala	Val	Gly	Phe	Lys	Leu	Leu	Gln
465					470					475					480
Glu	Glu	Asn	Cys	Asp	Ile	Phe	Gln	Asn	Leu	Thr	Lys	Lys	Gln	Arg	Gln
				485					490					495	
Ser	Leu	Arg	Lys	Met	Val	Ile	Asp	Ile	Val	Leu	Ala	Thr	Asp	Met	Ser
			500					505					510		
Lys	His	Met	Asn	Leu	Leu	Ala	Asp	Leu	Lys	Thr	Met	Val	Glu	Thr	Lys
		515					520					525			
Lys	Val	Thr	Ser	Ser	Gly	Val	Leu	Leu	Leu	Asp	Asn	Tyr	Ser	Asp	Arg
	530					535						540			
Ile	Gln	Val	Leu	Gln	Asn	Met	Val	His	Cys	Ala	Asp	Leu	Ser	Asn	Pro
545					550					555					560
Thr	Lys	Pro	Leu	Gln	Leu	Tyr	Arg	Gln	Trp	Thr	Asp	Arg	Ile	Met	Glu
				565					570					575	
Glu	Phe	Phe	Arg	Gln	Gly	Asp	Arg	Glu	Arg	Glu	Arg	Gly	Met	Glu	Ile
			580					585					590		
Ser	Pro	Met	Cys	Asp	Lys	His	Asn	Ala	Ser	Val	Glu	Lys	Ser	Gln	Val
		595					600					605			
Gly	Phe	Ile	Asp	Tyr	Ile	Val	His	Pro	Leu	Trp	Glu	Thr	Trp	Ala	Asp
	610					615					620				
Leu	Val	His	Pro	Asp	Ala	Gln	Asp	Ile	Leu	Asp	Thr	Leu	Glu	Asp	Asn
625					630					635					640
Arg	Glu	Trp	Tyr	Gln	Ser	Thr	Ile	Pro	Gln	Ser	Pro	Ser	Pro	Ala	Pro
				645					650					655	
Asp	Asp	Pro	Glu	Glu	Gly	Arg	Gln	Gly	Gln	Thr	Glu	Lys	Phe	Gln	Phe
			660					665					670		
Glu	Leu	Thr	Leu	Glu	Glu	Asp	Gly	Glu	Ser	Asp	Thr	Glu	Lys	Asp	Ser
		675					680					685			
Gly	Ser	Gln	Val	Glu	Glu	Asp	Thr	Ser	Cys	Ser	Asp	Ser	Lys	Thr	Leu
	690					695					700				
Cys	Thr	Gln	Asp	Ser	Glu	Ser	Thr	Glu	Ile	Pro	Leu	Asp	Glu	Gln	Val
705					710					715					720
Glu	Glu	Glu	Ala	Val	Gly	Glu	Glu	Glu	Glu	Ser	Gln	Pro	Glu	Ala	Cys
				725					730					735	
Val	Ile	Asp	Asp	Arg	Ser	Pro	Asp	Thr							
			740					745							

<210> 5

<211> 215

<212> PRT

<213> Homo Sapien

<400> 5

Met	Ala	Gln	Gln	Thr	Ser	Pro	Asp	Thr	Leu	Thr	Val	Pro	Glu	Val	Asp
1				5					10					15	
Asn	Pro	His	Cys	Pro	Asn	Pro	Trp	Leu	Asn	Glu	Asp	Leu	Val	Lys	Ser
			20					25				30			
Leu	Arg	Glu	Asn	Leu	Leu	Gln	His	Glu	Lys	Ser	Lys	Thr	Ala	Arg	Lys
		35					40					45			
Ser	Val	Ser	Pro	Lys	Leu	Ser	Pro	Val	Ile	Ser	Pro	Arg	Asn	Ser	Pro
	50					55					60				
Arg	Leu	Leu	Arg	Arg	Met	Leu	Leu	Ser	Ser	Asn	Ile	Pro	Lys	Gln	Arg
65					70					75					80

Fig. 7.4

368/375

```

Arg Phe Thr Val Ala His Thr Cys Phe Asp Val Asp Asn Gly Thr Ser
      85          90          95
Ala Gly Arg Ser Pro Leu Asp Pro Met Thr Ser Pro Gly Ser Gly Leu
      100        105        110
Ile Leu Gln Ala Asn Phe Val His Ser Gln Arg Arg Glu Ser Phe Leu
      115        120        125
Tyr Arg Ser Asp Ser Asp Tyr Asp Leu Ser Pro Lys Ser Met Ser Arg
      130        135        140
Asn Ser Ser Ile Ala Ser Asp Ile His Gly Asp Asp Leu Ile Val Thr
      145        150        155        160
Pro Phe Ala Gln Val Leu Ala Ser Leu Arg Thr Val Arg Asn Asn Phe
      165        170        175
Ala Ala Leu Thr Asn Leu Gln Asp Arg Ala Pro Ser Lys Arg Ser Pro
      180        185        190
Met Cys Asn Gln Pro Ser Ile Asn Lys Ala Thr Ile Thr Gly Leu Tyr
      195        200        205
Asn Gly Ile Ile Ala Phe Leu
      210        215

```

```

<210> 6
<211> 673
<212> PRT
<213> Homo Sapien

```

```

<400> 6
Met Met His Val Asn Asn Phe Pro Phe Arg Arg His Ser Trp Ile Cys
  1          5          10          15
Phe Asp Val Asp Asn Gly Thr Ser Ala Gly Arg Ser Pro Leu Asp Pro
      20        25        30
Met Thr Ser Pro Gly Ser Gly Leu Ile Leu Gln Ala Asn Phe Val His
      35        40        45
Ser Gln Arg Arg Glu Ser Phe Leu Tyr Arg Ser Asp Ser Asp Tyr Asp
      50        55        60
Leu Ser Pro Lys Ser Met Ser Arg Asn Ser Ser Ile Ala Ser Asp Ile
      65        70        75        80
His Gly Asp Asp Leu Ile Val Thr Pro Phe Ala Gln Val Leu Ala Ser
      85        90        95
Leu Arg Thr Val Arg Asn Asn Phe Ala Ala Leu Thr Asn Leu Gln Asp
      100       105       110
Arg Ala Pro Ser Lys Arg Ser Pro Met Cys Asn Gln Pro Ser Ile Asn
      115       120       125
Lys Ala Thr Ile Thr Glu Glu Ala Tyr Gln Lys Leu Ala Ser Glu Thr
      130       135       140
Leu Glu Glu Leu Asp Trp Cys Leu Asp Gln Leu Glu Thr Leu Gln Thr
      145       150       155       160
Arg His Ser Val Ser Glu Met Ala Ser Asn Lys Phe Lys Arg Met Leu
      165       170       175

Asn Arg Glu Leu Thr His Leu Ser Glu Met Ser Arg Ser Gly Asn Gln
      180       185       190
Val Ser Glu Phe Ile Ser Asn Thr Phe Leu Asp Lys Gln His Glu Val
      195       200       205
Glu Ile Pro Ser Pro Thr Gln Lys Glu Lys Glu Lys Lys Arg Pro
      210       215       220
Met Ser Gln Ile Ser Gly Val Lys Lys Leu Met His Ser Ser Ser Leu
      225       230       235       240
Thr Asn Ser Ser Ile Pro Arg Phe Gly Val Lys Thr Glu Gln Glu Asp
      245       250       255
Val Leu Ala Lys Glu Leu Glu Asp Val Asn Lys Trp Gly Leu His Val
      260       265       270
Phe Arg Ile Ala Glu Leu Ser Gly Asn Arg Pro Leu Thr Val Ile Met
      275       280       285
His Thr Ile Phe Gln Glu Arg Asp Leu Leu Lys Thr Phe Lys Ile Pro
      290       295       300

```

Fig. 7.5

369/375

Val	Asp	Thr	Leu	Ile	Thr	Tyr	Leu	Met	Thr	Leu	Glu	Asp	His	Tyr	His
305					310					315					320
Ala	Asp	Val	Ala	Tyr	His	Asn	Asn	Ile	His	Ala	Ala	Asp	Val	Val	Gln
			325						330					335	
Ser	Thr	His	Val	Leu	Leu	Ser	Thr	Pro	Ala	Leu	Glu	Ala	Val	Phe	Thr
			340					345					350		
Asp	Leu	Glu	Ile	Leu	Ala	Ala	Ile	Phe	Ala	Ser	Ala	Ile	His	Asp	Val
		355					360					365			
Asp	His	Pro	Gly	Val	Ser	Asn	Gln	Phe	Leu	Ile	Asn	Thr	Asn	Ser	Glu
	370					375					380				
Leu	Ala	Leu	Met	Tyr	Asn	Asp	Ser	Ser	Val	Leu	Glu	Asn	His	His	Leu
385					390					395					400
Ala	Val	Gly	Phe	Lys	Leu	Leu	Gln	Glu	Glu	Asn	Cys	Asp	Ile	Phe	Gln
			405					410						415	
Asn	Leu	Thr	Lys	Lys	Gln	Arg	Gln	Ser	Leu	Arg	Lys	Met	Val	Ile	Asp
		420					425						430		
Ile	Val	Leu	Ala	Thr	Asp	Met	Ser	Lys	His	Met	Asn	Leu	Leu	Ala	Asp
	435						440					445			
Leu	Lys	Thr	Met	Val	Glu	Thr	Lys	Lys	Val	Thr	Ser	Ser	Gly	Val	Leu
	450					455					460				
Leu	Leu	Asp	Asn	Tyr	Ser	Asp	Arg	Ile	Gln	Val	Leu	Gln	Asn	Met	Val
465					470				475						480
His	Cys	Ala	Asp	Leu	Ser	Asn	Pro	Thr	Lys	Pro	Leu	Gln	Leu	Tyr	Arg
			485					490						495	
Gln	Trp	Thr	Asp	Arg	Ile	Met	Glu	Glu	Phe	Phe	Arg	Gln	Gly	Asp	Arg
		500						505					510		
Glu	Arg	Glu	Arg	Gly	Met	Glu	Ile	Ser	Pro	Met	Cys	Asp	Lys	His	Asn
	515						520					525			
Ala	Ser	Val	Glu	Lys	Ser	Gln	Val	Gly	Phe	Ile	Asp	Tyr	Ile	Val	His
	530					535					540				
Pro	Leu	Trp	Glu	Thr	Trp	Ala	Asp	Leu	Val	His	Pro	Asp	Ala	Gln	Asp
545					550					555					560
Ile	Leu	Asp	Thr	Leu	Glu	Asp	Asn	Arg	Glu	Trp	Tyr	Gln	Ser	Thr	Ile
			565					570						575	
Pro	Gln	Ser	Pro	Ser	Pro	Ala	Pro	Asp	Asp	Pro	Glu	Glu	Gly	Arg	Gln
		580						585					590		
Gly	Gln	Thr	Glu	Lys	Phe	Gln	Phe	Glu	Leu	Thr	Leu	Glu	Glu	Asp	Gly
	595						600					605			
Glu	Ser	Asp	Thr	Glu	Lys	Asp	Ser	Gly	Ser	Gln	Val	Glu	Glu	Asp	Thr
	610					615					620				
Ser	Cys	Ser	Asp	Ser	Lys	Thr	Leu	Cys	Thr	Gln	Asp	Ser	Glu	Ser	Thr
625					630					635					640
Glu	Ile	Pro	Leu	Asp	Glu	Gln	Val	Glu	Glu	Glu	Ala	Val	Gly	Glu	Glu
			645						650					655	
Glu	Glu	Ser	Gln	Pro	Glu	Ala	Cys	Val	Ile	Asp	Asp	Arg	Ser	Pro	Asp
			660					665					670		

Thr

<210> 7
 <211> 15
 <212> PRT
 <213> Homo Sapien

<400> 7
 Met Met His Val Asn Asn Phe Pro Phe Arg Arg His Ser Trp Ile
 1 5 10 15

<210> 8
 <211> 687
 <212> PRT
 <213> Homo Sapien

<400> 8

Fig. 7.6

370/375

Met	Ala	Phe	Val	Trp	Asp	Pro	Leu	Gly	Ala	Thr	Val	Pro	Gly	Pro	Ser	1	5	10	15
Thr	Arg	Ala	Lys	Ser	Arg	Leu	Arg	Phe	Ser	Lys	Ser	Tyr	Ser	Phe	Asp	20	25	30	
Val	Asp	Asn	Gly	Thr	Ser	Ala	Gly	Arg	Ser	Pro	Leu	Asp	Pro	Met	Thr	35	40	45	
Ser	Pro	Gly	Ser	Gly	Leu	Ile	Leu	Gln	Ala	Asn	Phe	Val	His	Ser	Gln	50	55	60	
Arg	Arg	Glu	Ser	Phe	Leu	Tyr	Arg	Ser	Asp	Ser	Asp	Tyr	Asp	Leu	Ser	65	70	75	80
Pro	Lys	Ser	Met	Ser	Arg	Asn	Ser	Ser	Ile	Ala	Ser	Asp	Ile	His	Gly	85	90	95	
Asp	Asp	Leu	Ile	Val	Thr	Pro	Phe	Ala	Gln	Val	Leu	Ala	Ser	Leu	Arg	100	105	110	
Thr	Val	Arg	Asn	Asn	Phe	Ala	Ala	Leu	Thr	Asn	Leu	Gln	Asp	Arg	Ala	115	120	125	
Pro	Ser	Lys	Arg	Ser	Pro	Met	Cys	Asn	Gln	Pro	Ser	Ile	Asn	Lys	Ala	130	135	140	
Thr	Ile	Thr	Glu	Glu	Ala	Tyr	Gln	Lys	Leu	Ala	Ser	Glu	Thr	Leu	Glu	145	150	155	160
Glu	Leu	Asp	Trp	Cys	Leu	Asp	Gln	Leu	Glu	Thr	Leu	Gln	Thr	Arg	His	165	170	175	
Ser	Val	Ser	Glu	Met	Ala	Ser	Asn	Lys	Phe	Lys	Arg	Met	Leu	Asn	Arg	180	185	190	
Glu	Leu	Thr	His	Leu	Ser	Glu	Met	Ser	Arg	Ser	Gly	Asn	Gln	Val	Ser	195	200	205	
Glu	Phe	Ile	Ser	Asn	Thr	Phe	Leu	Asp	Lys	Gln	His	Glu	Val	Glu	Ile	210	215	220	
Pro	Ser	Pro	Thr	Gln	Lys	Glu	Lys	Glu	Lys	Lys	Lys	Arg	Pro	Met	Ser	225	230	235	240
Gln	Ile	Ser	Gly	Val	Lys	Lys	Leu	Met	His	Ser	Ser	Ser	Leu	Thr	Asn	245	250	255	
Ser	Ser	Ile	Pro	Arg	Phe	Gly	Val	Lys	Thr	Glu	Gln	Glu	Asp	Val	Leu	260	265	270	
Ala	Lys	Glu	Leu	Glu	Asp	Val	Asn	Lys	Trp	Gly	Leu	His	Val	Phe	Arg	275	280	285	
Ile	Ala	Glu	Leu	Ser	Gly	Asn	Arg	Pro	Leu	Thr	Val	Ile	Met	His	Thr	290	295	300	
Ile	Phe	Gln	Glu	Arg	Asp	Leu	Leu	Lys	Thr	Phe	Lys	Ile	Pro	Val	Asp	305	310	315	320
Thr	Leu	Ile	Thr	Tyr	Leu	Met	Thr	Leu	Glu	Asp	His	Tyr	His	Ala	Asp	325	330	335	
Val	Ala	Tyr	His	Asn	Asn	Ile	His	Ala	Ala	Asp	Val	Val	Gln	Ser	Thr	340	345	350	
His	Val	Leu	Leu	Ser	Thr	Pro	Ala	Leu	Glu	Ala	Val	Phe	Thr	Asp	Leu	355	360	365	
Glu	Ile	Leu	Ala	Ala	Ile	Phe	Ala	Ser	Ala	Ile	His	Asp	Val	Asp	His	370	375	380	
Pro	Gly	Val	Ser	Asn	Gln	Phe	Leu	Ile	Asn	Thr	Asn	Ser	Glu	Leu	Ala	385	390	395	400
Leu	Met	Tyr	Asn	Asp	Ser	Ser	Val	Leu	Glu	Asn	His	His	Leu	Ala	Val	405	410	415	
Gly	Phe	Lys	Leu	Leu	Gln	Glu	Glu	Asn	Cys	Asp	Ile	Phe	Gln	Asn	Leu	420	425	430	
Thr	Lys	Lys	Gln	Arg	Gln	Ser	Leu	Arg	Lys	Met	Val	Ile	Asp	Ile	Val	435	440	445	
Leu	Ala	Thr	Asp	Met	Ser	Lys	His	Met	Asn	Leu	Leu	Ala	Asp	Leu	Lys	450	455	460	
Thr	Met	Val	Glu	Thr	Lys	Lys	Val	Thr	Ser	Ser	Gly	Val	Leu	Leu	Leu	465	470	475	480
Asp	Asn	Tyr	Ser	Asp	Arg	Ile	Gln	Val	Leu	Gln	Asn	Met	Val	His	Cys	485	490	495	
Ala	Asp	Leu	Ser	Asn	Pro	Thr	Lys	Pro	Leu	Gln	Leu	Tyr	Arg	Gln	Trp	500	505	510	
Thr	Asp	Arg	Ile	Met	Glu	Glu	Phe	Phe	Arg	Gln	Gly	Asp	Arg	Glu	Arg	515	520	525	

Fig. 7.7

371/375

Glu Arg Gly Met Glu Ile Ser Pro Met Cys Asp Lys His Asn Ala Ser
 530 535 540
 Val Glu Lys Ser Gln Val Gly Phe Ile Asp Tyr Ile Val His Pro Leu
 545 550 555 560
 Trp Glu Thr Trp Ala Asp Leu Val His Pro Asp Ala Gln Asp Ile Leu
 565 570 575
 Asp Thr Leu Glu Asp Asn Arg Glu Trp Tyr Gln Ser Thr Ile Pro Gln
 580 585 590
 Ser Pro Ser Pro Ala Pro Asp Asp Pro Glu Glu Gly Arg Gln Gly Gln
 595 600 605
 Thr Glu Lys Phe Gln Phe Glu Leu Thr Leu Glu Glu Asp Gly Glu Ser
 610 615 620
 Asp Thr Glu Lys Asp Ser Gly Ser Gln Val Glu Glu Asp Thr Ser Cys
 625 630 635 640
 Ser Asp Ser Lys Thr Leu Cys Thr Gln Asp Ser Glu Ser Thr Glu Ile
 645 650 655
 Pro Leu Asp Glu Gln Val Glu Glu Glu Ala Val Gly Glu Glu Glu Glu
 660 665 670
 Ser Gln Pro Glu Ala Cys Val Ile Asp Asp Arg Ser Pro Asp Thr
 675 680 685

<210> 9

<211> 585

<212> PRT

<213> Homo Sapien

<400> 9

Met Lys Glu Gln Pro Ser Cys Ala Gly Thr Gly His Pro Ser Met Ala
 1 5 10 15
 Gly Tyr Gly Arg Met Ala Pro Phe Glu Leu Ala Ser Gly Pro Val Lys
 20 25 30
 Arg Leu Arg Thr Glu Ser Pro Phe Pro Cys Leu Phe Ala Glu Glu Ala
 35 40 45
 Tyr Gln Lys Leu Ala Ser Glu Thr Leu Glu Glu Leu Asp Trp Cys Leu
 50 55 60
 Asp Gln Leu Glu Thr Leu Gln Thr Arg His Ser Val Ser Glu Met Ala
 65 70 75 80
 Ser Asn Lys Phe Lys Arg Met Leu Asn Arg Glu Leu Thr His Leu Ser
 85 90 95
 Glu Met Ser Arg Ser Gly Asn Gln Val Ser Glu Phe Ile Ser Asn Thr
 100 105 110
 Phe Leu Asp Lys Gln His Glu Val Glu Ile Pro Ser Pro Thr Gln Lys
 115 120 125
 Glu Lys Glu Lys Lys Lys Arg Pro Met Ser Gln Ile Ser Gly Val Lys
 130 135 140
 Lys Leu Met His Ser Ser Ser Leu Thr Asn Ser Ser Ile Pro Arg Phe
 145 150 155 160
 Gly Val Lys Thr Glu Gln Glu Asp Val Leu Ala Lys Glu Leu Glu Asp
 165 170 175
 Val Asn Lys Trp Gly Leu His Val Phe Arg Ile Ala Glu Leu Ser Gly
 180 185 190
 Asn Arg Pro Leu Thr Val Ile Met His Thr Ile Phe Gln Glu Arg Asp
 195 200 205
 Leu Leu Lys Thr Phe Lys Ile Pro Val Asp Thr Leu Ile Thr Tyr Leu
 210 215 220
 Met Thr Leu Glu Asp His Tyr His Ala Asp Val Ala Tyr His Asn Asn
 225 230 235 240
 Ile His Ala Ala Asp Val Val Gln Ser Thr His Val Leu Leu Ser Thr
 245 250 255
 Pro Ala Leu Glu Ala Val Phe Thr Asp Leu Glu Ile Leu Ala Ala Ile
 260 265 270
 Phe Ala Ser Ala Ile His Asp Val Asp His Pro Gly Val Ser Asn Gln
 275 280 285
 Phe Leu Ile Asn Thr Asn Ser Glu Leu Ala Leu Met Tyr Asn Asp Ser
 290 295 300

Fig. 7.8

372/375

Ser Val Leu Glu Asn His His Leu Ala Val Gly Phe Lys Leu Leu Gln
 305 310 315 320
 Glu Glu Asn Cys Asp Ile Phe Gln Asn Leu Thr Lys Lys Gln Arg Gln
 325 330 335
 Ser Leu Arg Lys Met Val Ile Asp Ile Val Leu Ala Thr Asp Met Ser
 340 345 350
 Lys His Met Asn Leu Leu Ala Asp Leu Lys Thr Met Val Glu Thr Lys
 355 360 365
 Lys Val Thr Ser Ser Gly Val Leu Leu Leu Asp Asn Tyr Ser Asp Arg
 370 375 380
 Ile Gln Val Leu Gln Asn Met Val His Cys Ala Asp Leu Ser Asn Pro
 385 390 395 400
 Thr Lys Pro Leu Gln Leu Tyr Arg Gln Trp Thr Asp Arg Ile Met Glu
 405 410 415
 Glu Phe Phe Arg Gln Gly Asp Arg Glu Arg Glu Arg Gly Met Glu Ile
 420 425 430
 Ser Pro Met Cys Asp Lys His Asn Ala Ser Val Glu Lys Ser Gln Val
 435 440 445
 Gly Phe Ile Asp Tyr Ile Val His Pro Leu Trp Glu Thr Trp Ala Asp
 450 455 460
 Leu Val His Pro Asp Ala Gln Asp Ile Leu Asp Thr Leu Glu Asp Asn
 465 470 475 480
 Arg Glu Trp Tyr Gln Ser Thr Ile Pro Gln Ser Pro Ser Pro Ala Pro
 485 490 495
 Asp Asp Pro Glu Glu Gly Arg Gln Gly Gln Thr Glu Lys Phe Gln Phe
 500 505 510
 Glu Leu Thr Leu Glu Glu Asp Gly Glu Ser Asp Thr Glu Lys Asp Ser
 515 520 525
 Gly Ser Gln Val Glu Glu Asp Thr Ser Cys Ser Asp Ser Lys Thr Leu
 530 535 540
 Cys Thr Gln Asp Ser Glu Ser Thr Glu Ile Pro Leu Asp Glu Gln Val
 545 550 555 560
 Glu Glu Glu Ala Val Gly Glu Glu Glu Glu Ser Gln Pro Glu Ala Cys
 565 570 575
 Val Ile Asp Asp Arg Ser Pro Asp Thr
 580 585

<210> 10
 <211> 507
 <212> PRT
 <213> Homo Sapien

<400> 10
 Met Ala Ser Asn Lys Phe Lys Arg Met Leu Asn Arg Glu Leu Thr His
 1 5 10 15
 Leu Ser Glu Met Ser Arg Ser Gly Asn Gln Val Ser Glu Phe Ile Ser
 20 25 30
 Asn Thr Phe Leu Asp Lys Gln His Glu Val Glu Ile Pro Ser Pro Thr
 35 40 45
 Gln Lys Glu Lys Glu Lys Lys Arg Pro Met Ser Gln Ile Ser Gly
 50 55 60
 Val Lys Lys Leu Met His Ser Ser Ser Leu Thr Asn Ser Ser Ile Pro
 65 70 75 80
 Arg Phe Gly Val Lys Thr Glu Gln Glu Asp Val Leu Ala Lys Glu Leu
 85 90 95
 Glu Asp Val Asn Lys Trp Gly Leu His Val Phe Arg Ile Ala Glu Leu
 100 105 110
 Ser Gly Asn Arg Pro Leu Thr Val Ile Met His Thr Ile Phe Gln Glu
 115 120 125
 Arg Asp Leu Leu Lys Thr Phe Lys Ile Pro Val Asp Thr Leu Ile Thr
 130 135 140
 Tyr Leu Met Thr Leu Glu Asp His Tyr His Ala Asp Val Ala Tyr His
 145 150 155 160
 Asn Asn Ile His Ala Ala Asp Val Val Gln Ser Thr His Val Leu Leu
 165 170 175

Fig. 7.9

373/375

Ser	Thr	Pro	Ala	Leu	Glu	Ala	Val	Phe	Thr	Asp	Leu	Glu	Ile	Leu	Ala
			180					185					190		
Ala	Ile	Phe	Ala	Ser	Ala	Ile	His	Asp	Val	Asp	His	Pro	Gly	Val	Ser
		195					200					205			
Asn	Gln	Phe	Leu	Ile	Asn	Thr	Asn	Ser	Glu	Leu	Ala	Leu	Met	Tyr	Asn
	210					215					220				
Asp	Ser	Ser	Val	Leu	Glu	Asn	His	His	Leu	Ala	Val	Gly	Phe	Lys	Leu
225				230					235						240
Leu	Gln	Glu	Glu	Asn	Cys	Asp	Ile	Phe	Gln	Asn	Leu	Thr	Lys	Lys	Gln
				245					250					255	
Arg	Gln	Ser	Leu	Arg	Lys	Met	Val	Ile	Asp	Ile	Val	Leu	Ala	Thr	Asp
			260					265					270		
Met	Ser	Lys	His	Met	Asn	Leu	Leu	Ala	Asp	Leu	Lys	Thr	Met	Val	Glu
		275					280					285			
Thr	Lys	Lys	Val	Thr	Ser	Ser	Gly	Val	Leu	Leu	Leu	Asp	Asn	Tyr	Ser
	290					295					300				
Asp	Arg	Ile	Gln	Val	Leu	Gln	Asn	Met	Val	His	Cys	Ala	Asp	Leu	Ser
305					310					315					320
Asn	Pro	Thr	Lys	Pro	Leu	Gln	Leu	Tyr	Arg	Gln	Trp	Thr	Asp	Arg	Ile
				325					330					335	
Met	Glu	Glu	Phe	Phe	Arg	Gln	Gly	Asp	Arg	Glu	Arg	Glu	Arg	Gly	Met
			340					345					350		
Glu	Ile	Ser	Pro	Met	Cys	Asp	Lys	His	Asn	Ala	Ser	Val	Glu	Lys	Ser
		355					360					365			
Gln	Val	Gly	Phe	Ile	Asp	Tyr	Ile	Val	His	Pro	Leu	Trp	Glu	Thr	Trp
	370					375					380				
Ala	Asp	Leu	Val	His	Pro	Asp	Ala	Gln	Asp	Ile	Leu	Asp	Thr	Leu	Glu
385					390					395					400
Asp	Asn	Arg	Glu	Trp	Tyr	Gln	Ser	Thr	Ile	Pro	Gln	Ser	Pro	Ser	Pro
				405					410					415	
Ala	Pro	Asp	Asp	Pro	Glu	Glu	Gly	Arg	Gln	Gly	Gln	Thr	Glu	Lys	Phe
			420					425					430		
Gln	Phe	Glu	Leu	Thr	Leu	Glu	Glu	Asp	Gly	Glu	Ser	Asp	Thr	Glu	Lys
		435					440				445				
Asp	Ser	Gly	Ser	Gln	Val	Glu	Glu	Asp	Thr	Ser	Cys	Ser	Asp	Ser	Lys
	450					455					460				
Thr	Leu	Cys	Thr	Gln	Asp	Ser	Glu	Ser	Thr	Glu	Ile	Pro	Leu	Asp	Glu
465					470					475					480
Gln	Val	Glu	Glu	Glu	Ala	Val	Gly	Glu	Glu	Glu	Glu	Ser	Gln	Pro	Glu
				485					490					495	
Ala	Cys	Val	Ile	Asp	Asp	Arg	Ser	Pro	Asp	Thr					
			500					505							

Fig. 7.10

Exon start Exon end	Exons	142207 142328 4D7-1	444645 444775 4D7-2	641649 641878 4D7-3	736254 737226 4D4	861791 862202 4D5	1044051 1044190 4D3	1273404 1273709 4D6	1354347 1355128 4D8	1414511 1414702 LF1	1436943 1436979 LF2	1445217 1445290 LF3
mRNA/cDNA variants	Isoform											
UO2882	4D4									*	*	*
L20969	4D5		*							*	*	*
AF012073	4D3					*				*	*	*
L20970	4D2						*			*	*	*
AF012074	4D3						*			*	*	*
U50159	4D2											
U50158	4D1											
U50157	4DN3											
AJ250854	4D4				*					*	*	*
NM_006203	4DN1				*					*	*	*
AJ250852	4DN2				*					*	*	*
AJ250855	4DN3					*				*	*	*
BC008390												
novel cDNA identified by deCODE												
RT-PCR	4D6							*		*	*	*
CAP-RACE	4D7	*	*	*						*	*	*
CAP-RACE	4D8								*	*	*	*

374/375

Fig. 8A

Fig. 8B

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 September 2002 (26.09.2002)

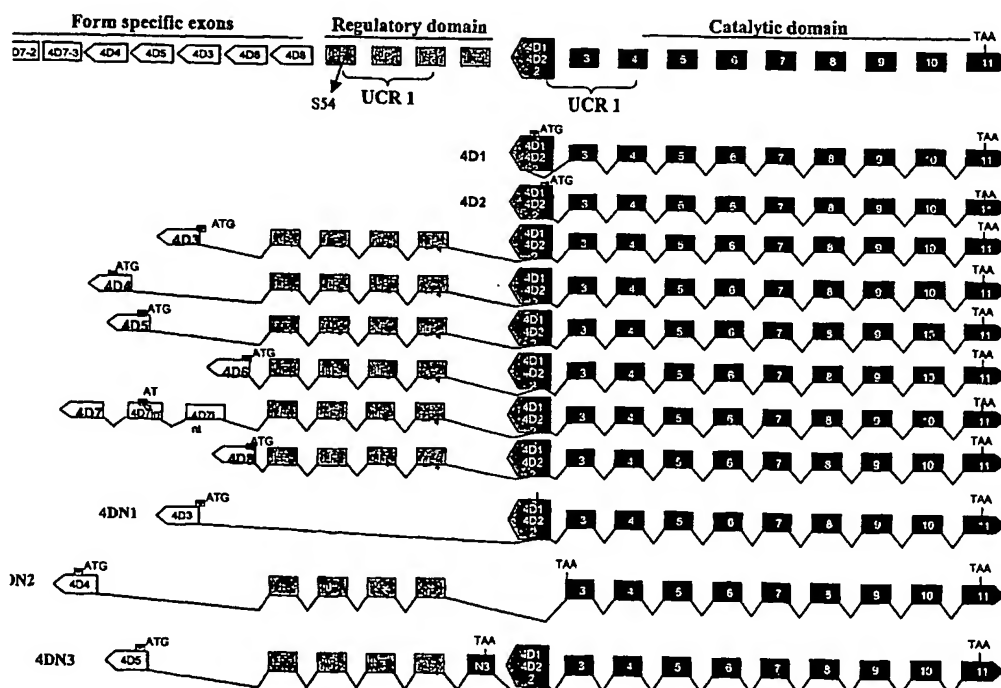
PCT

(10) International Publication Number
WO 2002/074992 A3

- (51) International Patent Classification⁷: C12N 9/16, C12Q 1/68, C12N 15/52, A61K 38/46
- (21) International Application Number: PCT/IB2002/000565
- (22) International Filing Date: 25 February 2002 (25.02.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
09/811,352 19 March 2001 (19.03.2001) US
10/067,514 4 February 2002 (04.02.2002) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier applications:
US 09/811,352 (CON)
Filed on 19 March 2001 (19.03.2001)
US Not furnished (CON)
Filed on 4 February 2002 (04.02.2002)
- (71) Applicant (for all designated States except US): DECODE GENETICS EHF. [IS/IS]; Sturlugötu 8, IS-101 Reykjavik (IS).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): GRETARSDOTTIR, Solveig [IS/IS]; Smaragata 6, IS-101 Reykjavik (IS). JONSDOTTIR, Sif [IS/IS]; Vesturgata 73, IS-101 Reykjavik (IS). REYNISDOTTIR, Sigridur, Th. [IS/IS]; Storargerdi 8, IS-108 Reykjavik (IS).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: PHOSPHODIESTERASE 4D GENES RELATED TO HUMAN STROKE



(57) Abstract: A role of the human PDE4D gene in stroke is disclosed. New exons, referred to as 4D7-1, 4D7-2, 4D7-3, 4D6 and 4D have been identified. Moreover, three splice variants have been identified. Methods for diagnosis, predictions of clinical course and treatment for stroke using polymorphisms in the PDE4D gene are also disclosed.



Published:

— *with international search report*

(88) Date of publication of the international search report:

8 April 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N9/16 C12Q1/68 C12N15/52 A61K38/46

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C12Q A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>GRAEME B BOLGER ET AL: "Characterization of five different proteins produced by alternatively spliced mRNAs from the human cAMP-specific phosphodiesterase PDE4D gene"</p> <p>BIOCHEMICAL JOURNAL, PORTLAND PRESS, LONDON, GB, vol. 328, 1997, pages 539-548, XP002150449 ISSN: 0264-6021 the whole document</p>	<p>1-18,22, 26,30, 32,34, 35,39, 40,42, 43,47-50</p>
A	<p>---</p> <p>-/--</p>	<p>19-21,59</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

23 October 2002

Date of mailing of the international search report

05. 03. 2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Patrick Andersson

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	XAVIER MIRÓ ET AL: "Phosphodiesterases 4D and 7A splice variants in the response of HUVEC cells to TNF-alpha1." BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol. 274, 2000, pages 415-421, XP002902795 ACADEMIC PRESS ISSN: 0006-291X the whole document	1-18,22, 26,30, 32,34, 35,39, 40,42, 43,47-58
A	---	19,20,59
X	WO 01 00851 A (MEMORY PHARMACEUTICAL CORP) 4 January 2001 (2001-01-04) the whole document	1-18,22, 26,30, 32,34, 35,39, 40,42, 43,47-58
A	---	19-21,59
X	WO 00 23091 A (SCUDDER KURT MARSHALL ;BIOIMAGE A S (DK); THASTRUP OLE (DK); BJOER) 27 April 2000 (2000-04-27) the whole document	1-18,22, 26,30, 32,34, 35,39, 40,42, 43,47-58
A	---	19-21,59
X	WO 00 40714 A (ARROW AMY ;OLIGOS ETC INC (US); THOMPSON TERRY (US); DALE RODERIC) 13 July 2000 (2000-07-13) the whole document	30, 48-51, 54-58
A	---	59
A	WO 00 77226 A (KAPELLER LIBERMANN ROSANA ;WHITE DAVID (US); ROBISON KEITH E (US);) 21 December 2000 (2000-12-21) the whole document	1-22,26, 30,32, 34,35, 39,40, 42,43, 47-59

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 02/00565

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 19, 44-46
because they relate to subject matter not required to be searched by this Authority, namely:
see FURTHER INFORMATION sheet PCT/ISA/210
2. ☒ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-59 (partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-59 (partially)

Each sequence of SEQ ID 1-10 and 12 represent one invention.

2. Claims: 1-59 (partially)

Each sequence of SEQ ID 1-10 and 12 represent one invention.

3. Claims: 1-59 (partially)

Each sequence of SEQ ID 1-10 and 12 represent one invention.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Claims Nos.: 19, 44-46

Claims 19, 44-46 relate to methods of treatment of the human or animal body by surgery or by therapy / diagnostic methods practised on the human or animal body / Rule 39.1(iv). Nevertheless, a search has been executed for these claims. The search has been based on the alleged effects of the compounds/ compositions.

Continuation of Box I.2

Claims Nos.: 23-25, 27-29, 31, 33, 36-38, 41, 44-46 and parts of 40 and 42.

Claims 23-25, 27-29, 31, 33, 36-38, 41, 44-46 and parts of claims 40 and 42 relate to agents interacting with a polypeptide encoded by a phosphodiesterase 4D gene or the expression of this gene.

These claims could include known compounds e.g. known phosphodiesterase inhibitors. Moreover, the description does not give any example of such substance. Identification of agents with the claimed methods does not give the identified agents PER SE any unique properties and thus, the description lacks disclosure and the claim lacks support within the meaning of PCT Articles 5 and 6.

A meaningful search of claims 23-25, 27-29, 31, 33, 36-38, 41, 44-46 and parts of claims 40 and 42 is impossible and consequently, the claims have not been searched.

The following parts of claims 40 and 42 have been searched: A phosphodiesterase 4D gene PER SE; fragments, variants or derivatives is considered to be unclear, e.g. fragment could in its extreme be one single nucleotide.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 02/00565

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0100851	A	04-01-2001	AU 5886400 A EP 1190070 A1 JP 2003503063 T WO 0100851 A1	31-01-2001 27-03-2002 28-01-2003 04-01-2001
WO 0023091	A	27-04-2000	AU 6189999 A WO 0023091 A2 EP 1146888 A2	08-05-2000 27-04-2000 24-10-2001
WO 0040714	A	13-07-2000	AU 2480800 A CA 2357950 A1 EP 1141278 A2 JP 2002534086 T WO 0040714 A2	24-07-2000 13-07-2000 10-10-2001 15-10-2002 13-07-2000
WO 0077226	A	21-12-2000	US 6146876 A AU 5608000 A EP 1192261 A1 JP 2003502046 T WO 0077226 A1	14-11-2000 02-01-2001 03-04-2002 21-01-2003 21-12-2000

THIS PAGE BLANK (USPTO)